Sandhills Community College

CATALOG 1968-1970

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A Comprehensive Community College
Chartered by the
North Carolina State Board of Education
November 7, 1963

GENERAL CATALOGUE

Issue No. II
Circular of Information
and
Announcement of Courses
1968-1970

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ACADEMIC CALENDAR
1968-1969

FALL QUARTER, 1968

September 9-11, Monday through Wednesday	Orientation of new students
September 12, Thursday	Registration of returning students
September 13, Friday	Registration of new students
September 16, Monday	First day of classes
September 20, Friday	Add period ends
September 27, Friday	Drop period ends
October 23-November 6, Wednesday through Wednesday	Pre-registration period for winter quarter
November 21, Thursday	Last day of classes
November 22-27, Friday through Wednesday	Final examinations
November 28-December 1, Thursday through Sunday	Thanksgiving holidays

WINTER QUARTER, 1968-69

December 2, Monday	Registration
December 3, Tuesday	First day of classes
December 9, Monday	Add period ends
December 16, Monday	Drop period ends
December 20, Friday	Last day of classes before Christmas holidays
December 21,-January 1, Saturday through Wednesday	Christmas holidays
January 2, Thursday	Classes resume
January 20-31, Monday through Friday	Pre-registration period for spring quarter
February 21	Last day of classes
February 24-27 Monday through Thursday	Final examinations

SPRING QUARTER, 1969

March 5, Wednesday	Registration
March 6, Thursday	First day of classes
March 12, Wednesday	Add period ends
March 19, Wednesday	Drop period ends
April 2, Wednesday	Last day of classes before Easter holidays
April 3-April 8, Thursday through Tuesday	Easter holidays
April 9, Wednesday	Classes resume
April 21-May 2, Monday through Friday	Pre-registration period for summer session and fall quarter
May 21, Wednesday	Last day of classes
May 22-27, Thursday through Tuesday	Final examinations
May 28, Wednesday	Commencement

Academic Calendar—continued

SUMMER QUARTER, 1969—FULL TERM FOR TRADE STUDENTS.

June 4, Wednesday	Registration
June 5, Thursday	First day of classes
July 4, Friday	Independence Day holiday
August 14-15, Thursday through Friday	Final examinations
August 22, Friday	Commencement

FIRST TECHNICAL SESSION FOR COLLEGE TRANSFER AND TECHNICAL STUDENTS

June 4, Wednesday	Registration
June 5, Thursday	First day of classes
June 9, Monday	Add period ends
June 11, Wednesday	Drop period ends
July 4, Friday	Independence Day holiday
July 10, Thursday	Last day of classes
July 11, Friday	Final examinations

SECOND SUMMER SESSION FOR COLLEGE TRANSFER AND TECHNICAL STUDENTS

July 14, Monday	Registration
July 15, Tuesday	First day of classes
July 18, Friday	Add period ends
July 22, Tuesday	Drop period ends
August 19, Tuesday	Last day of classes
August 20, Wednesday	Final examinations
August 22, Friday	Commencement

ACADEMIC CALENDAR
1969-1970

FALL QUARTER, 1969

September 8-10	Orientation of new students
September 11, Thursday	Registration of returning students
September 12, Friday	Registration of new students
September 15, Monday	First day of classes
September 19, Friday	Add period ends
September 26, Friday	Drop period ends
October 22-November 5	Pre-registration period for winter quarter
November 20, Thursday	Last day of classes
November 21-November 26	Final examinations
November 27-November 30 (Thursday thru Sunday)	Thanksgiving holidays

WINTER QUARTER, 1969-1970

December 1, Monday	Registration
December 2, Tuesday	First day of classes
December 8, Monday	Add period ends
December 15, Monday	Drop period ends
December 19, Friday	Last day of classes before Christmas holidays
December 20-January 1 (Saturday thru Thursday)	Christmas holidays
January 5, Monday	Classes resume
January 19-January 30	Pre-registration period
February 23, Monday	Last day of classes
February 24-February 27	Final examinations

SPRING QUARTER, 1970

March 4, Wednesday	Registration
March 5, Thursday	First day of classes
March 11, Wednesday	Add period ends
March 18, Wednesday	Drop period ends
March 25, Wednesday	Last day of classes before Easter holidays
March 26-March 31 (Thursday thru Tuesday)	Easter holidays
April 1, Wednesday	Classes resume
April 13-April 24	Pre-registration period for summer session and fall quarter
May 20, Wednesday	Last day of classes
May 21-May 26 (Thursday thru Wednesday)	Final examinations
May 27, Wednesday	Commencement

SUMMER QUARTER, 1970—FULL TERM FOR TRADE STUDENTS

June 3, Wednesday	Registration
June 4, Thursday	First day of classes
July 3, Friday	Independence Day holiday
August 13-14	Final examinations
August 21	Commencement

Academic Calendar—continued

FIRST SUMMER SESSION FOR COLLEGE TRANSFER AND TECHNICAL STUDENTS

June 3, Wednesday	Registration
June 4, Thursday	First day of classes
June 8, Monday	Add period ends
June 10, Wednesday	Drop period ends
July 3, Friday	Independence Day holiday
July 9, Thursday	Last day of classes
July 10, Friday	Final examinations

SECOND SUMMER SESSION FOR COLLEGE TRANSFER AND TECHNICAL STUDENTS

July 13, Monday	Registration
July 14, Tuesday	First day of classes
July 17, Friday	Add period ends
July 21, Tuesday	Drop period ends
August 18, Tuesday	Last day of classes
August 19, Wednesday	Final examinations
August 21, Friday	Commencement

FALL QUARTER, 1970

September 7-9	Orientation of new students
September 10, Thursday	Registration of returning students
September 11, Friday	Registration of new students
September 14, Monday	First day of classes
September 18, Friday	Add period ends
September 25, Friday	Drop period ends
October 21-November 4	Pre-registration period for winter quarter
November 19, Thursday	Last day of classes
November 20-November 25	Final examinations
November 26-November 30 (Thursday thru Sunday)	Thanksgiving holidays

SANDHILLS COMMUNITY COLLEGE

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HELEN APPLE ..... *Secretary to the Director of Personnel Services*

DALE AVERITT ..... *Bookkeeper*

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CLAUDIA CARPENTER ..... *Secretary, Chairman of Horticulture Program & Landscape Gardening*

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AUSTIN MORRIS ..... *Asst. Superintendent of Bldgs.*

IMOGEN POOLE ..... *Book Store*

MARI LEE WEAVER ..... *Recptionist & Faculty Secretary*

JAMES W. WILLIAMS ..... *Asst. Superintendent of Grounds*

MARVIN WILLIAMS ..... *Superintendent of Bldgs. & Grounds*

TERESA WOOD ..... *Library Secretary*

HISTORY OF THE COLLEGE

Sandhills Community College was created as the result of legislation passed by the 1963 General Assembly of North Carolina. The legislation established a system of community colleges administered by a Department of Community Colleges under the direction of the State Board of Education.

Shortly after the passage of the Act a group of prominent Moore County citizens, under the leadership of H. Clifton Blue of Aberdeen, petitioned the State Board of Education to establish a community college in Moore County. After approval of the petition, the citizens of Moore County voted in favor of a one million dollar bond issue for capital construction and a tax levy for maintenance of facilities.

In December 1963, Dr. Raymond A. Stone was selected to be the first president of the new college.

In November 1964, ground was broken for construction on a 180-acre tract of land given by Mrs. C. Louis Meyer of Lake Forest, Illinois and Pinehurst, North Carolina.

Classes, accommodating approximately four hundred students, began on October 1, 1965 in temporary facilities in the town of Southern Pines. The first of the buildings was completed by the beginning of the 1966 spring quarter and much of the instructional program was moved to the campus at that time.

The three buildings originally planned were completed by the opening of the 1967 fall quarter. In addition, a fourth building designed to house the automotive trades program was in use. The 1967 full-time fall enrollment was approximately eight hundred and fifty students. Landscaping was completed during that fall.

Completion of the athletic field and the construction of a recreational lake were accomplished in the spring and summer of 1968.

During the three years of its existence, the college has doubled both its student body and its faculty. Construction of an additional building to house the new program in Landscape Gardening began in the fall of 1968.

PURPOSE

Sandhills Community College, in carrying out the role of a comprehensive community college, has as its objectives:

To provide the first two years of collegiate work which may be transferred to senior institutions;

To provide two years of study and experience designed to prepare students to earn a living as technical personnel in either business, industry, government, the health occupations, or self-employment;

To provide study and experience to prepare students for initial employment in recognized trades;

To provide developmental and remedial study for students with weakness and deficiency primarily in English and mathematics;

To provide collegiate, technical, and vocational courses for individuals who wish to further their education but who do not seek a degree;

To provide programs of vocational education for employed adults who need training or retraining to update or upgrade skills and knowledge;

To provide basic adult education and study toward the achievement of the high school equivalency certificate; and

To provide courses that will meet the general adult, cultural, and community service needs of the people of the area.

GENERAL INFORMATION

LIFE AT THE COLLEGE

The Sandhills of North Carolina. Sandhills Community College is located near Southern Pines, Aberdeen and Pinehurst, in the region from which it takes its name. It is easily accessible from all directions by highway, rail and air.

The climate is delightful year-round for outdoor activities. The resort center of Pinehurst-Southern Pines boasts sixteen 18-hole golf courses within five miles of the College, with additional courses being planned. In winter and spring trotters, pacers and racing horses train in the area. Fox hunts, hunter trials and gymkhanas are held almost weekly during the resort season.

The Campus. A modern, air-conditioned, three-building complex forms the heart of Sandhills Community College. The Administrative Building houses the offices of the President and other administrative personnel, the rapidly growing library, audio-visual department, audio-laboratory, business education classrooms, multi-classrooms, the learning laboratory and a one hundred forty seat lecture hall. Faculty offices and seminar rooms are located on the upper floor of the library.

Adjoining the Administration Building to the west is the Mary Luman Meyer Building, named for a generous benefactor. This building contains modern and completely equipped chemistry, physics and biology laboratories. Art laboratories, drafting classrooms, the music classroom, the electronics laboratory, and additional administrative offices are also located in this building.

The Student Union Building, located behind the Administration Building, contains spacious lounges, both indoor and outdoor, and is the center for student life on the campus. A cafeteria is provided for serving meals while light snacks are available through vending machines. A small gymnasium, locker rooms, a student bookstore, a first-aid room, and counseling offices are also located in the Student Union Building.

The Automotive Building, situated to the east of the three building complex, houses the auto mechanics and body repair facilities and classrooms and the College maintenance services shops. A fifth building and greenhouses, to house the program in landscape gardening, is under construction nearby.

With trees and shrubs blooming every season against the evergreen background of long leaf pines, a year-round setting of natural beauty is assured on the Sandhills campus.

The athletic field near the Student Union Building is laid out in a pattern of oblongs, squares, diamonds and ovals. Tennis courts, a baseball field, courses for track events and grass-

covered areas for archery and other sports, afford the facilities for an extensive program in health and physical fitness. For basketball, riding, golf and bowling Sandhills Community College makes use of facilities in nearby Southern Pines and Pinehurst.

All aspects of the College, the buildings and the campus, have been designed to encourage study in beautiful surroundings which are modern, convenient and an inspiration to a better way of life.

The Role of the Faculty. Sandhills Community College is staffed by qualified teachers and administrators who have been trained to provide the most competent education possible. Emphasis is placed on instruction rather than research; therefore, the role of the faculty is to assist students on a group and individual basis, maximizing the use of the instructors' time in working with students.

The Role of the Student. The successful student today is one who has developed not only his intellectual abilities, but also his social, spiritual, civic and physical abilities. The role of the student at Sandhills Community College is to strive to become the successful student by broadening his experiences through social and intellectual interchange with faculty, administration and fellow students. Sandhills Community College stands ready to challenge its students to fulfill this role.

Student Housing. Sandhills Community College was established to provide education for students within commuting distance; therefore, funds for dormitory facilities were not included in initial appropriations. The college, however, maintains a list of available student living accommodations for those who find it necessary or desirable to reside in the area of the college while in attendance. Arrangements for rooms or apartments are the responsibility of the individual student and his parents.

Student Activities. A varied program of student activities at Sandhills enriches the leisure time activities of the student and assists him in developing his educational, vocational, and social skills. These activities in the areas of student government, student union, dance, fine arts, publications and athletics afford the student the opportunity of becoming associated with one or more of the following student organizations or clubs: Student Government Association, Spartans Pep Club, Chorus, Sandhills Playmakers, Fine Arts Club, Nurses Club, Choral Ensemble, YDC, YRC, Veterans Club, the student newspaper, the yearbook, and various religious organizations.

There are special, traditional occasions at Sandhills Community College in which student participation is very important. Among these are Parents' Day each fall, Founder's Day Celebration in the winter, and the Festival of Fine Arts in the spring.

Automobiles. Students are required to register their cars for parking privileges. The registration of cars will be filed in the Student Personnel Office. A nominal fee will be charged for parking privileges.

Guidance Services. Professionally trained counselors are available at Sandhills Community College to meet the guidance needs of students and other interested persons in the areas of educational, vocational and personal concerns.

Students seeking financial aid are referred to the Director of Student Personnel who serves as Financial Aid Officer. A number of assistance programs, including Federal, state and local funds and privately-endowed funds, are available to Sandhills' students.

Incoming students are provided a program of orientation designed to acquaint them with the comprehensive community college as an institution where they might continue their education. The diversification of programs and levels of achievements required are presented through the joint efforts of program directors and the counselors. Citizens of the community, educators, and industrialists also participate in the orientation program, stressing the need for continuing education as related to career success.

In addition, the Director of Placement assists students in obtaining full-time and part-time jobs while counselors assist students in transferring to senior institutions.

Learning Resources. The learning resources department at Sandhills Community College includes three areas, each serving specific and unique functions:

The Library. The library, located in the Administrative Building provides invaluable services to the student body and faculty in comfortable and pleasant surroundings. Students can study in individual study carrels from the collection of nearly 25,000 volumes. A completely new and up-to-date reference section, combined with important volumes in the general and special areas, is housed in open stacks, readily accessible to students. The professionally trained library staff is always available for consultation on reference questions or book selection. The library is open from 7:30 a.m. to 9:30 p.m. Monday through Thursday and from 7:30 a.m. to 5:00 p.m. on Friday.

The Audiovisual Center. Sandhills Community College provides audiovisual services for faculty and students with offices located on the second floor of the Administrative Building. The Audiovisual Center maintains a library of 16 mm sound, motion picture films, filmstrips, phone records, tape recordings, and other instructional materials. The Center is open from 8:00 a.m. to 5:00 p.m. Monday through Friday. Students and faculty are welcome to use the materials at any time, and areas are available for preview purposes.

The Dial Access Information Retrieval System (DAIRS). Sandhills Community College is answering the problems of an increasing number of students, and the demand for higher quality in education by instituting changes in the traditional educational patterns and the use of a wide variety of resources in the new Learning Center. Based on the belief that the students need a place specifically designed for independent study, Sandhills Community College provides students with private study carrels, complete with a bookshelf, counter top and a dial-access information retrieval station. The dial-access system provides the students with access to any one of 68 taped programs (changed every week). Any number of students from one to fifty eight can have simultaneous access to any one of the scheduled programs. There are also additional taped program available by request, for individual random access by the student. Plans are being prepared to expand to 118 carrels and over 250 programs in the near future. The system is available to students from 7:30 a.m. to 10:00 p.m. Monday through Thursday and from 7:30 a.m. to 5 p.m. Friday.

POLICIES AND PRACTICES

Admission Procedure. Sandhills Community College maintains an "open door" admissions policy for all applicants who are high school graduates or hold a high school equivalency certificate. Selective placement of individual students in the different curricula within the College is determined by officials of the institution through use of high school records and test scores, and interviews with students.

All entering students are required to submit application forms, high school transcripts, and medical records as a part of the admissions process. Transcripts of all school work done since graduation from high school are required in the case of transfer students. The American College Test is required of all applicants for the college transfer program and the two year technical programs. This test is not required for students entering the one year trade programs. In the case of the trade programs, they are given the Differential Aptitude Test on the campus.

After a student has completed the three forms mentioned above, taken either the American College Test or the Differential Aptitude Test, he will then be interviewed by a counselor on the campus. At this conference his program is selected and his schedule made for the beginning quarter.

All communications concerning admissions should be directed to the Office of Admissions, Sandhills Community College, Southern Pines, North Carolina 28387.

Registration. The first days of each quarter are used for registration. This consists of being assigned to classes and paying tuition and fees. An extra fee of $5.00 will be charged for late registration.

The normal academic load for a student in the college transfer program is 16 hours; for the student in the technical programs, 17 hours. A request to exceed this may be approved by the advisor where the increase is due to difficulty in scheduling. Registration with as many as 19 hours must carry the approval and signature of the Director of Student Personnel Services.

Trade students are permitted to take the required number of hours in their respective programs.

It is a policy of this institution to permit certain technical or trade students to enroll in additional subjects and laboratory work beyond those shown in the catalog in order to broaden their training.

When in any quarter the total weekly contact hours listed are fewer than twenty-five in a technical curriculum and fewer than thirty hours in a vocational trade curriculum, a student may enroll on request and with the approval of the institution for additional instructional hours to make up twenty-five hours per week in a technical curriculum or sufficient hours of attendance to make up thirty hours per week in a vocational trade curriculum.

Classification of Students. For purposes of clarity, the following student classifications have been specified:

Full-time student—the student enrolled in twelve or more hours of credit courses.

Part-time student—the student enrolled in fewer than twelve hours of credit courses.

Freshman —the student who has completed with a passing grade less than forty-five quarter hours in credit courses.

Sophomore —the student who has completed with a passing grade forty-five or more quarter hours of credit courses.

Tuition and Fees. In accordance with the basic concept of comprehensive community colleges, all fees are nominal and are held to absolute minimums. Tuition per quarter is as follows:

A.	College Transfer full-time students (in-state)	
	14 quarter hours or more	$ 42.00
	Part-time students (in-state) per quarter hour	3.00
B.	Vocational, Technical, and Developmental full-time students (in-state)	
	13 quarter hours or more	32.00
	Part-time students (in-state) per quarter hour	2.50
C.	Out-of-state student tuition is determined at a rate of 2½ times those for in-state students.	
D.	Additional fees for college transfer, technical, vocational, and developmental students:	
	1. Student activity fee (per quarter) FWS	6.00
	Summer	2.00
	2. Physical education uniform fee	
	Men	2.50
	Women	3.50
E.	Extension and Adult Education fees are determined by the course.	

Fees are payable at time of registration.

ADDITIONAL EXPENSES FOR NURSING STUDENTS:	
NLN Testing Fee (annual)	8.00
Malpractice Insurance (annual)	5.00
Uniforms (approximately)	70.00
	$ 83.00

ADDITIONAL EXPENSES FOR VOCATIONAL STUDENTS:	
Automobile Body Repair Tools	60.00
Automobile Mechanic Tools	110.00
Drafting Instruments	35.00

Student Accident Insurance. Accident insurance is available to students, faculty and staff, on a voluntary basis. The annual premium is $2.00. Arrangements for this coverage can be made during registration or through the Business Office.

Refunds. Tuition refund for students shall not be made unless the student is, in the judgment of the institution, compelled to withdraw for unavoidable reasons. In such cases, two-thirds (⅔) of the student's tuition may be refunded if the student withdraws within ten (10) calendar days after the first day of classes as published in the school calendar. Tuition refunds will not be considered after that time. Tuition refunds will not be considered for tuitions of five dollars ($5.00) or less, except that if a course or curriculum fails to materialize, all the students' tuition shall be refunded.

In order to comply with federal regulations in institutions not regionally accredited, the State Board of Education authorized modification of the tuition refund policy so that veterans or war orphans receiving benefits under U.S. Code, Title 38, can be refunded the pro rata portion of the tuition fee not used up at the time of withdrawal of such students.

Financial Assistance. Financial assistance is available to qualifying students. For information concerning loans and the work-study program, students are directed to the Director of Student Personnel. Each applicant must be a regular student and be pursuing a course leading to graduation.

Individuals and groups have made available limited funds for students in the nursing program. All of the scholarships are awarded on the basis of need. Some are restricted to Moore County students and some to graduates of specific high schools.

Industries have donated funds to be used in the college financial aid program. Much of this is used for "matching funds" to acquire additional Federal money.

Federal Assistance—Three programs involve Federal funds.

1. College work-study provides qualified students with a maximum of fifteen hours per week of work.
2. Educational opportunity grants are made to qualified students.
3. Defense educational loans may be made to qualified students to help defray cost of their education at Sandhills Community College.

Degrees granted. Sandhills Community College offers the following types of curricula and instruction:

Associate-in-Arts Degree

A two-year program in the liberal arts providing transfer credit to senior colleges and universities.

Associate-in-Applied Science Degree

A two-year program in a business, nursing, or other technical curriculum providing general education and skill-training adequate for entry into specific vocations.

Diploma

One-year programs in vocational curricula providing skill and training adequate for entry into specific vocations.

Certificate of Completion

Recognition given to students who complete certain short courses in specific subject areas.

Degree Requirements. The basic requirement for the Associate-in-Arts or the Associate-in-Applied-Science degree is the completion of ninety-six quarter hours of college transfer or technical level courses, which include required courses for the program in which the student is enrolled. In order to be eligible for a degree, the student must have achieved an overall quality point ratio of 1.0 ("C" average). Consult the College Transfer Curriculum section of this catalog for specific course requirements for the Associate-in-Arts Degree and the Technical Curriculum section for course requirements in the several programs leading to the Associate-in-Applied Science Degree.

Change of Course. Course changes can be made by the student with the consent of his advisor. SUCH CHANGES BECOME EFFECTIVE ONLY WHEN RECORDED IN THE OFFICE OF THE REGISTRAR. No one may be enrolled in a new course later than one week after the beginning of the quarter.

If a student wishes to drop a class, he may do so without penalty (1) provided the action is taken within two weeks after the beginning of class and (2) provided the consent of his advisor has been obtained.

To drop a course, the student must present to the Registrar's office a drop/add form which has been signed by his advisor.

To add a course, the student must obtain from his faculty advisor a signed drop/add form which must then be taken to the Registrar's office. If the course has not been closed, the student will receive a class admissions card which will be presented to the instructor of the course on the first day the student attends class.

Any student who officially drops a course more than two weeks after classes begin for the quarter will be assigned a grade of DP or DF depending on whether the student is passing or failing. The student must bring the drop/add form, signed by the faculty advisor and the instructor of the course dropped, to the Registrar's office; otherwise, the grade will be recorded as F. If the grade is DP, the hours are not counted in figuring quality point ratio. If the grade is DF, the hours are counted. Courses dropped at any time without permission are recorded as F and the hours are counted.

Withdrawal from College. A student who wishes to withdraw from the College for any reason must obtain permission from the Director of Student Personnel and sign a withdrawal card. Students who withdraw prior to two weeks from the end of the quarter will receive a grade of W. If a student withdraws officially at any time during the last two weeks of the quarter, he will receive a grade of WP or WF, according to the quality of the work in the class. A grade of F will be recorded for any student who withdraws without permission. In order to be readmitted the following quarter after withdrawal, the student must submit a letter of justification to the Director of student personnel.

Courses Repeated for Credit. When a course is repeated, all grades are counted in determining the student's quality point ratio. Only the last hours earned will be counted in hours earned for the degree.

Grading. The following system of grading is used at Sandhills Community College:

A (excellent) is the highest grade given; it is reserved for those students whose work is of a markedly superior quality.

B (good) is the grade given for work which, while not notably superior, is clearly above average.

C (fair) is the grade given for satisfactory work done by the average student.

D (passing) is the grade given for work which, while not altogether satisfactory, is good enough to entitle the student to receive credit for the course.

F (failing) is the grade given for failure and indicates that no credit can be received for the course. A student will receive an automatic grade of F if he drops or withdraws unofficially at any time or for overcutting.

I (incomplete) is the grade given when the examination or some other assigned project has not been completed by the end of a class. This grade becomes an F if the deficiency is not removed by the end of the following quarter.

W (withdrawn) is the grade given when the student has received official permission to drop out of school before the last two weeks of the quarter.

WP (withdrew passing) is the grade assigned to courses from which the student withdraws passing during the last two weeks of the quarter.

WF (withdrew failing) is the grade assigned to courses from which the student withdraws failing during the last two weeks of the quarter.

DP (dropped passing) is the grade assigned to a course dropped with a passing grade more than two weeks after registration; hours are not counted.

DF (dropped failing) is the grade assigned to a course dropped more than two weeks after registration; the hours are counted.

Academic Regulations and Policies. In order to safeguard the quality of work necessary for degree programs, guidelines have been established which will enable students to determine progress in their work; Progress will be determined by maintaining a satisfactory quality point ratio as the student attempts course work. The faculty has developed a scale of minimum quality point ratios required of students based on total hours attempted. For example, after the student has attempted twenty hours of work, he must have a quality point ratio of .40; for forty-five hours attempted, the quality point ratio must be .84; for seventy-eight hours or more, the quality point ratio must be 1.00.

Quality point ratio is determined by dividing the total number of quality points earned by the number of hours attempted. The average is expressed in ratio. A ratio of 1.00 indicates that the student has an average of "C", 2.00 indicates an average of "B", 3.00 indicates an average of "A". Letter grades are assigned the following equivalents in quality points:

A — 3 quality points per quarter hour
B — 2 quality points per quarter hour
C — 1 quality point per quarter hour
D — 0 quality points—course credit
F — 0 grade points or credit

A candidate will receive his degree or diploma when he has satisfactorily completed the course requirements for his program and has an "overall" "C" average (1.00) on all work attempted.

A student may be denied permission to continue his program if his work is deemed deficient.

Probation and Suspension Policies. The Office of Student Personnel will review students' records at the end of each quarter. Students whose records reflect academic progress which does not meet the standard of the quality point gradation scale will be

subject to one of the following rulings by the Office of Student Personnel:

1. *The student is to be placed on academic probation* which will require him to maintain a "C" average on all work attempted until he reaches the required quality point ratio score. Students who fail to remove probation will be referred to the Office of Student Personnel for a suspension ruling. (While on academic probation students are not permitted to participate in extracurricular activities.)

2. *The student is to be suspended from the College* (a) without the privilege of being readmitted or (b) may be readmitted after one quarter or more of suspension.

After consultation with the counseling staff, the student may be enrolled in a different curricular program by the Office of Student Personnel as an alternative to suspension.

All students are encouraged to consult periodically with their advisors concerning academic progress.

Advanced Placement. Advanced placement is offered to those students who, because of their demonstrated abilities, are qualified to accelerate their studies. To obtain advanced placement at least three options are available: (1) the student may take a proficiency examination in any subject when he believes he already has mastery of the course material; application for such an examination must be made to the Dean of Instruction. (2) Advanced placement and credit is given for a grade of 3 or better on the subject matter proficiency tests of the CEEB's Advanced Placement Program. (3) The entering student may be selected for an advanced section in English, mathematics and other subjects on the basis of his previous academic record and a high performance on the College's testing program. Students who qualify for advanced placement in one or more freshman courses must begin at the next highest level. Quarter hours credit without grade for the omitted course or courses is assigned upon completion of the advanced course with a grade of "C" or higher. Students passing with less than a "C" will be relieved of the requirement of the omitted course without credit.

Guided Independent Study. Students wishing to take college courses listed in this catalog through independent study may do so by securing the approval of the instructor of the course prior to registration. The student must submit an agreement containing work to be accomplished during the quarter, including test requirements, term papers, and required reading and/or laboratory work. A copy of the agreement must be forwarded to

the Dean of instruction for final approval. To obtain credit for work attempted through independent study, the student must complete all requirements of the agreement and must hold conferences with the instructor at least once weekly.

The regular grading system applies to all independent study. Grades earned have the same status as those acquired through regular class attendance.

Student Honors and Awards. Sandhills Community College recognizes student academic achievement by identifying students who qualify for the Dean's List and those who qualify as Honor Graduates.

Dean's List—A student may achieve the distinction of being placed on the Dean's List by earning a "B" average or better or by achieving a 2.0 quality point ratio on twelve or more quarter hours work. The student can have no grade less than "C" on any course taken. The Dean's List will be published following the report of quarterly grades.

Honor Graduates—A student may achieve Honor Graduate recognition during graduation exercises by maintaining a 2.5 quality point ratio on all work attempted during the two-year period he is enrolled at Sandhills College.

Final Examinations and Tests. Examinations should provide an opportunity for the student to express his mastery of the subject matter of the course. They serve as a means of reviewing and organizing the course for the student. Examinations include problems which require the student to make application of the material he has learned in the course.

Final examinations, term papers, or special projects are usually required in all courses. Instructors keep examinations on file for one quarter following the examination.

A general schedule, announced several weeks before the end of each quarter, will set times for examinations. A student absent from an examination will be given a course grade of Incomplete which will become an F unless an official excuse and permission to take a special examination are secured from the Dean of instruction. Special examinations for officially excused absences must be taken by the end of the following quarter.

Instructors may give mid-quarter or other announced tests as they deem necessary. A student who is absent from an announced test for justifiable reasons will be allowed to take a make-up test at a time mutually convenient to him and the instructor.

Attendance. Students are expected to attend all classes. It is recognized, however, that absence from class sometimes becomes necessary for reason of illness, personal emergency, or other justifiable cause. Absences may be excused by the instructor when incidence of illness, emergency, or other justifiable cause is known. Instructors will report unexcused absences to the Director of Student Personnel, and direct the student to the Director of Student Personnel for investigation and action. A student may be dropped from a class for unexcused absence.

Students dismissed from classes for excused absences will re-receive the grade of DP on their permanent record; for unexcused absences, DF.

Student Conduct. Sandhills Community College expects all students to conduct themselves with honor and to maintain high standards of responsible citizenship. Any student who is guilty of disorderly conduct may expect disciplinary action. This may be reprimand, probation, restricted privileges, or suspension.

ENTRANCE REQUIREMENTS TO THE ASSOCIATE IN APPLIED SCIENCE DEGREE CURRICULA

I. *GENERAL ENTRANCE REQUIREMENTS*

The minimum entrance requirements for admission to credit courses for the associate in applied science degree is as follows:

A. Be a high school graduate or possess a high school equivalency certificate issued by the North Carolina Department of Public Instruction.

B. Make an acceptable score on the American College Test (ACT). The ACT is not required of transfer students presenting 24 quarter hours credit with a grade of "C" or better from an accredited school of higher learning.

C. Have a personal interview with a designated college representative.

D. Be in acceptable mental and physical health.

II. ADDITIONAL ENTRANCE REQUIREMENTS FOR SPECIFIC CURRICULA

A. *Associate Degree Nursing*

An interview with the chairman of the nursing faculty and/or a designated nursing faculty member and further

testing on a need basis will be required for admission to the nursing curriculum. Evidence of mental and physical health must be submitted on required medical and dental records not earlier than July 1, and not later than August 15, prior to admission in the fall quarter. Qualified students will begin this curriculum only in the fall quarter. Eligible transfer students may be admitted other than the fall quarter.

B. *Engineering Technology*
A minimum of two units in high school mathematics, one in algebra and one in geometry or two in algebra is required for admission to the architectural or civil engineering curriculum. One unit in high school physics or chemistry is desirable. Qualified students will begin this curriculum only in the fall quarter. Eligible transfer students may be admitted other than the fall quarter.

C. *Mental Health Associate*
An interview with a member of the mental health faculty and further testing if the need is indicated, will be required for admission to the mental health associate curriculum. Qualified students will begin this curriculum only in the fall quarter. Eligible transfer students may be admitted other than the fall quarter.

D. *Landscape Gardening*
An interview with a member of the landscape gardening faculty is suggested before admission to this curriculum Qualified students will begin this curriculum only in the fall quarter. Eligible transfer students may be admitted other than the fall quarter.

COLLEGE TRANSFER PROGRAM

THE COLLEGE TRANSFER PROGRAM

General Information. The college transfer program is designed to provide course work which is transferable to senior institutions. A community college advisory committee, including representatives of state-supported colleges, has worked with the Department of Community Colleges and Sandhills Community College to assist in the development of curricula acceptable to senior institutions. Courses should transfer to the institution which the student plans to attend during the junior and senior years if they are applicable to the curriculum in which he enrolls. The student should be able to transfer to the senior institution with junior status after completing two years of credit work at Sandhills.

The college counseling staff work closely with the student in course selection. It is the responsibility of the student, however, to familiarize himself with the requirements of the senior institution to which he intends to transfer.

The Associate-in-Arts Degree. Students enrolled in college transfer curricula are awarded the Associate-in-Arts Degree upon satisfactory completion of ninety six quarter hours of work including the general education course requirements and physical education. The ninety six credit hours of work must be completed with an overall quality point ratio of 1.0 or better.

General Education Requirements for the Associate-in-Arts Degree. Associate-in-Arts Degree candidates must complete the following general education courses:

	Quarter Hours
English	14
110, 111, 112 English Composition	(9)
and	
201 or 202 British Literature	(5)
Mathematics	5 or 6
105, 106 Basic Concepts of Mathematics I, II	(6)
or	
110 College Algebra	(5)

Social Sciences	10
History 110, 111 Western Civilization I, II or History 151, 152 United States History I, II or Economics 201 and 202 (or a combination of the above)	
Natural Sciences	12
(three courses in laboratory science)	
Physical Education	8
Physical Education 150 Personal and Community Hygiene	(5)
*Activity Courses	(3)
Humanities	8
(Art, Drama, Foreign Languages, Literature, Music, Philosophy, Religion or Speech	
Total Required General Education	57 or 58 hours
Electives	38 hours
TOTAL REQUIRED	95 or 96 hours

Physically disabled students or veterans of military service are exempted from the physical education activity course requirement.

Suggested Courses of Study Leading to the Associate in Arts Degree

The following pages outline curriculum guides for students seeking either a two-year terminal liberal arts education or those planning to transfer to a senior college or university. The outlines suggest a sequence in which the various courses may be taken. Students may select their own courses and sequences; however, courses are often scheduled each quarter based on the sequence in the suggested guides. It is strongly suggested that students consult the catalog of the institution to which they intend to transfer to determine the entrance and degree requirements of that institution.

Student at Sandhills can complete the first two years in architecture, art, business, dentistry, education, engineering, forestry, law, liberal arts, mathematics, medicine, nursing, pharmacy, religion and science. Other less common programs can be developed from the course offerings.

Foreign language requirements should be fulfilled according to the requirements of the senior college to which the student plans to transfer. All foreign language requirements other than foreign language majors should be completed before the student leaves the junior college.

COLLEGE TRANSFER PROGRAM

AGRICULTURE PROGRAM

This program is designed for the student who intends to major in one of the agricultural sciences at a senior institution. In addition to the courses listed, the student may need to take advanced courses in sciences (BIO 201, BIO 206, CHM 205) in order to enter a senior college or university with junior status.

FIRST YEAR

1st Quarter	Hours
MAT 110	5
ENG 110	3
BIO 110	4
POL 201	5
PED Activity	1
	18

2nd Quarter	Hours
ENG 111	3
MAT 120	5
BIO 111	4
HIS	5
PED Activity	1
	18

3rd Quarter	Hours
ENG 112	3
MAT 150	5
BIO 112	4
HIS	5
PED Activity	1
	18

SECOND YEAR

4th Quarter	Hours
ENG 201	5
CHM 110	4
SOC 201	5
PED 150	5
	19

5th Quarter	Hours
PSY 201	5
CHM 111	4
HIS 151	5
	14

6th Quarter	Hours
ECO 201	5
CHM 112	4
Electives	6
	15

PRE-BUSINESS ADMINISTRATION

The business administration program is designed for the student who wishes to transfer to a senior institution for a major in business administration. This curriculum is subject to change, depending on the institution to which the student plans to transfer.

FIRST YEAR

1st Quarter	Hours
ENG 110	3
MAT 110	5
SCI	4
Foreign Language or Intro. to Business	5
	17

2nd Quarter	Hours
ENG 111	3
HIS 110 or 151	5
SCI	4
Foreign Language or Elective	5
	17

3rd Quarter	Hours
ENG 112	3
SCI	4
HIS 111 or 152	5
Elective	3
	15

SECOND YEAR

4th Quarter	Hours
ENG 201	5
HUMANITIES (Elective)	5
ECO 201	5
PED Activity	1
	16

5th Quarter	Hours
ENG 202	5
ECO 202	5
BUS 120	6
PED Activity	1
	17

6th Quarter	Hours
BUS 121	6
HUMANITIES	3
PED 150	5
PED Activity	1
	15

PRE-BUSINESS EDUCATION

This program is designed for the student who intends to teach business education in the public schools. In addition to the courses listed, one year of advanced dictation is strongly recommended.

FIRST YEAR

1st Quarter	Hours
ENG 110	3
MAT 110	5
BUS 102	3
BUS 106	3
PED Activity	1
	15

2nd Quarter	Hours
ENG 111	3
HIS 110 or 151	5
BUS 103	3
BUS 107	3
PED Activity	1
	15

SECOND YEAR

4th Quarter	Hours
ENG 201	5
PED 150	5
SCI	4
Humanities	3
	17

5th Quarter	Hours
SCI	4
ECO 201	5
BUS 120	6
	15

FIRST YEAR

3rd Quarter	Hours
ENG 112	3
BUS 104	3
BUS 108	3
BUS 101	5
PED Activity	1
	15

SECOND YEAR

6th Quarter	Hours
SCI	4
HIS 111 or 152	5
ECO 202	5
Elective Humanities	5
	19

PRE–ENGINEERING PROGRAM

This program may need to be modified dependent upon the background of the student and the institution to which the student plans to transfer. The quarter in which the courses may be offered is subject to modification, including possible attendance during the summer quarter.

FIRST YEAR

1st Quarter	Hours
ENG 110	3
MAT 110*	5
CHM 110	4
EGR 101	3
PED Activity	1
	16

2nd Quarter	Hours
ENG 111	3
MAT 120	5
CHM 111	4
EGR 102	3
PED Activity	1
	16

3rd Quarter	Hours
ENG 112	3
MAT 150	5
CHM 112	4
HIS 110	5
PED Activity	1
	18

SECOND YEAR

4th Quarter	Hours
ENG 201	5
MAT 201	5
PHY 210	5
PED Activity	1
	16

5th Quarter	Hours
HIS 111	5
MAT 202	5
PHY 211	5
PED Activity	1
	16

6th Quarter	Hours
PED 150	5
MAT 203	5
PHY 212	5
PED Activity	1
	16

PRE–ELEMENTARY EDUCATION PROGRAM

This program should be planned on an individual basis to meet requirements of the institution to which the student plans to transfer.

* The level of math taken will depend upon the background of the student.

FIRST YEAR

1st Quarter	Hours
ENG 110	3
MAT 105	3
SCI	4
HIS	5
PED Activity	1
	16

2nd Quarter	Hours
ENG 111	3
MAT 106	3
SCI	4
HIS	5
PED Activity	1
	16

3rd Quarter	Hours
ENG 112	3
MAT 107	3
SCI	4
PED 150	5
PED Activity	1
	16

SECOND YEAR

4th Quarter	Hours
ENG 201	5
POL 201	5
Electives	6
	16

5th Quarter	Hours
ENG 202	5
PSY 201	5
Electives	6
	16

6th Quarter	Hours
HIS	5
Electives	11
	16

PRE-FORESTRY PROGRAM

This program is subject to modification, depending on the senior institution to which the student plans to transfer. Additional courses which may be needed are BIO 110-111-112 and CHM 205.

FIRST YEAR

1st Quarter	Hours
ENG 110	3
MAT 110	5
CHM 110	4
EGR 101	3
PED Activity	1
	16

2nd Quarter	Hours
ENG 111	3
MAT 120	5
CHM 111	4
ECO 201	5
	18

3rd Quarter	Hours
ENG 112	3
MAT 150	5
CHM 112	4
PED 150	5
PED Activity	1
	18

SECOND YEAR

4th Quarter	Hours
ENG 201	5
PHY 201	4
MAT 201	5
Elective	3
	17

5th Quarter	Hours
PHY 202	4
HIS 151	5
POL 201	5
Elective	3
	17

6th Quarter	Hours
PHY 203	4
HIS 152	5
Electives	6
	15

LIBERAL ARTS OR PRE-LAW

This program is designed for students who (1) have definite plans to transfer to a liberal arts college or university for the third and fourth year but have not yet selected definite major areas of study, (2) desire to receive a comprehensive two-year general education without definite plans for completing a baccalaureate degree.

FIRST YEAR

1st Quarter	Hours
ENG 110	3
MAT 105 or 110	3-5
Foreign Language	5
HIS 110 or 151	5
	16-18

2nd Quarter	Hours
ENG 111	3
MAT 106 or 120	3-5
Foreign Language	5
HIS 111 or 152	5
	16-18

3rd Quarter	Hours
ENG 112	3
MAT 107 (or elective)	3-5
PED 150	5
Foreign Language	5
	16-18

SECOND YEAR

4th Quarter	Hours
ENG 201	5
SCIENCE	4
Foreign Language	5
PED Activity	1
	15

5th Quarter	Hours
SCIENCE	4
Humanities Elective	3-5
MUS 101	5
PED Activity	1
	13-15

6th Quarter	Hours
SCIENCE	4
Humanities Elective	3-5
ART 101	3
PED Activity	1
Social Science Elective	5
	16-18

MUSIC MAJOR TRANSFER PROGRAM LEADING TO THE BACHELOR OF MUSIC DEGEE

Although the college does not award an Associate Degree in music, courses are offered which will allow the students who plan to major in music the opportunity to complete foundation courses for transfer into institutions awarding the Bachelor of Music Degree. In order to pursue the course of study as outlined below, the student should have a major performing medium in one of the following: Voice, Keyboard, Band or Orchestral Instruments.

FIRST YEAR

1st Quarter	Hours
MUS 111	4
MUS 106 (Indiv.)	2
MUS 108, or 109, or 110	1
ENG 110	3
MAT 105	3
Electives	3-4
PED Activity	1
	17-18

2nd Quarter	Hours
MUS 112	4
MUS 106 (Indiv.)	2
MUS 108, or 109, or 110	1
MAT 106	3
Electives	3-4
ENG 111	3
PED Activity	1
	17-18

3rd Quarter	Hours
MUS 113	4
MUS 106 (Indiv.)	2
MUS 108, or 109, or 110	1
ENG 112	3
Electives	5-6
PED Activity	1
	16-17

SECOND YEAR

4th Quarter	Hours
MUS 211	4
MUS 206 (Indiv.)	2
MUS 108, 109, or 110	1
SCI 101	4
MUS 105 and/or class, MUS 107	1-2
Electives	4-5
	16-18

5th Quarter	Hours
MUS 212	4
MUS 206 (Indiv.)	2
MUS 108, or 109, or 110	1
SCI 102	4
MUS 105 and/or class, MUS 107	1-2
Electives	4-5
	16-18

6th Quarter	Hours
MUS 213	4
MUS 206 (Indiv.)	2
MUS 108, or 109, or 110	1
SCI 103	4
MUS 105 and/or class, MUS 107	1-2
Electives	4-5
	16-18

SECONDARY EDUCATION PROGRAM

The various secondary education programs should be planned on an individual basis, taking into consideration the area in which the student intends to teach and the institution to which he intends to transfer.

FIRST YEAR

1st Quarter	Hours
ENG 110	3
SCI	4
MAT 110	5
Foreign Lanuage or Elective	3-5
PED Activity	1
	16-18

2nd Quarter	Hours
ENG 111	3
SCI	4
HIS 110	5

SECOND YEAR

4th Quarter	Hours
ENG 201	5
PSY 201	5
POL 201	5
	15

FIRST YEAR

Foreign Language or Elective	3-5
PED Activity	1
	16-18

3rd Quarter	Hours
ENG 112	3
SCI	4
HIS 111	5
Foreign Language or Elective	3-5
PED Activity	1
	16-18

SECOND YEAR

5th Quarter	Hours
ENG 202	5
PED 150	5
HIS 151	5
	15

6th Quarter	Hours
HIS 152	5
SPH 101	5
Elective	5
	15

SCIENCE PROGRAMS

(Pre-medicine, pre-dentistry, pre-nursing, pre-pharmacy, pre-science)

Students who plan to study medicine, dentistry, pharmacy, nursing or veterinary medicine should consult with the counseling staff or their advisor to develop a planned program. The amount of work to be completed at Sandhills prior to transfer may vary with individual students. Additional science and mathematics courses may be needed.

FIRST YEAR

1st Quarter	Hours
ENG 110	3
MAT 110	5
SCIENCE	4
Foregin Language	5
PED Activity	1
	18

2nd Quarter	Hours
ENG 111	3
MAT 120	5
SCIENCE	4
Foreign Language	5
PED Activity	1
	18

3rd Quarter	Hours
ENG 112	3
SCIENCE	4
HIS 110	5
MAT 150	5
PED Activity	1
	18

SECOND YEAR

4th Quarter	Hours
ENG 201	5
SCIENCE	4
HIS 111	5
Elective	3
	17

5th Quarter	Hours
ENG 202	5
SCIENCE	4
PED 150	3
Elective	3
	17

6th Quarter	Hours
PSY 201	5
SCIENCE	4
Elective	3
	12

COLLEGE TRANSFER COURSE DESCRIPTIONS

College Transfer Course Numbering System

Course designations consist of a three-letter prefix and a number that indicate the curriculum and the level of the course. Freshman level college transfer courses are indicated by numbers ranging between 100-200; sophomore level college transfer courses, 200-300. On the same line, following the prefix and number, appears the course title, the number of quarter credit hours, the number of lecture and lab hours shown in parentheses, and the symbols F, W, S and SS indicating that the course is offered during the Fall, Winter, Spring and Summer Session quarters.

ART

ART 101 Art Appreciation 3 (3-0) FWS

Prerequisite: None

A study of the principles and elements of art; the interrelationship of the arts and their relation to the development of the individual and of cultures. Field trips to museums, dramatic productions, dance recitals, and concerts will be planned whenever possible.

ART 121 Color and Design I 3 (3-0) F

Prerequisite: None

The study of color and the exploration of color through practical application to beginning design problems, both two-dimensional and three-dimensional.

ART 122 Color and Design II 3 (1-5) W

Prerequisite: Art 121

Three-dimensional design in plastics, metal, paper and wood.

ART 123 Color and Design III 3 (1-5) S

Prerequisite: Art 121, Art 122

Advanced in two-dimensional problems in fabric printing, wall decoration in ceramics and creative stitchery.

ART 131 Drawing and Composition I 2 (1-3) F

Prerequisite: None

Beginning drawing and the study of the problems of composing a picture. A wide variety of techniques including pencil, charcoal, conti, pen and ink, brush and ink, will be used. Figure drawing, still-life and nature will be the subjects.

ART 132 Drawing and Composition II (Printmaking) 2 (1-3) W

Prerequisite: Art 131

Using the knowledge gained in Art 131, the techniques of printing will be explored—wood-cut, linocut, monoprint, etc.

ART 133 Drawing and Composition III 2 (0-3) S

Prerequisite: Art 131, Art 132

Advanced drawing techniques in figure representation. Problems in illustration—Serigraphy.

ART 141 **Oil Painting I** 3 (1-3) FWS
Prerequisite: None
Introduction to the technique of oil painting; includes the study of pictoral composition, color, and the elements and principles of art which assist the student in the development of a painting.

ART 142 **Oil Painting II** 3 (1-3) FWS
Prerequisite: Art 141
Advanced study of the techniques involved in oil painting and an introduction to figure and portrait painting.

ART 143 **Oil Painting III** 3 (1-3) FWS
Prerequisite: Art 141, Art 142
Portrait painting in oils.

ART 151 **Watercolor and Mixed Media** 2 (1-3) SS
Prerequisite: None
A creative approach to techniques and materials. Collage, montage, and mosaics will provide the problems for mixed media. Traditional techniques of watercolor painting will be a part of this course.

ART 161 **Beginning Sculpture** 2 (1-3) F
Prerequisite: None
Study of form in clay. Clay and other media will be used. Portrature in clay will be a part of the course experience.

ART 171 **Ceramic Design I** 3 (1-5) FWS
Prerequisite: None
Introduction to pottery making techniques including coil, slab, patch, pinch, and wheel thrown. Introduction to elementary experiments with clays and glazes, their composition and uses.

ART 172 **Ceramic Design II** 3 (1-5) FWS
Prerequisite: Art 171
Wheelthrowing techniques will be stressed. Study and experiments with North Carolina raw materials used in ceramic wares and experiments to develop new usable compositions.

ART 173 **Ceramic Design III** 3 (1-5) FWS
Prerequisite: Art 172
Advanced throwing. Advanced clay and glaze experiments and firing processes.

ART 174 **Ceramic Design IV** 3 (1-5) FWS
Prerequisite: Art 173
Glaze and body research. Wheel, mosaic and sculpture problems.

ART 175 **Ceramic Design V** 3 (1-5) FWS
Prerequisite: Art 174
Advanced design and materials research. Wheel work and sculptural techniques. Glaze and clay body research of original nature.

ART 176 **Ceramic Design VI** 3 (1-5) FWS
Prerequisite: Art 175
Advanced design culminating in 12 pieces of original pottery and ceramic sculpture suitable for exhibit.

BUSINESS AND ECONOMICS

BUS 101 Introduction to Business 5 (5-0) FWS SS*

Prerequisite: None

An introductory course in business education designed to provide the student with a basic understanding of the capitalistic system and the major facets of business—organization, production, personnel, finance and control. Emphasis is placed on the development of an adequate business vocabulary. Modern business trends and developments are stressed through the requirement of outside readings and the use of case studies.

BUS 102 Typewriting I 3 (1-4) FWS SS*

Prerequisite: None

Introduction to the touch typewriting system with emphasis on correct techniques, mastery of the keyboard, simple business correspondence, tabulation and manuscripts.

BUS 103 Typewriting II 3 (1-4) WS

Prerequisite: BUS 102 or the equivalent. Speed requirement 30 words per minute for 5 minutes.

Instruction emphasizes the development of speed and accuracy with further mastery of correct typewriting techniques. These skills and techniques applied in tabulation, manuscript, correspondence and business forms.

BUS 104 Typewriting III 3 (1-4) FS

Prerequisite: BUS 103 or the equivalent. Speed requirement, 40 words per minute for 5 minutes.

Emphasis on production typing problems and speed building. Attention to the development of the student's ability to function as an expert typist, producing mailable copies. The production units are tabulation, manuscript, correspondence, and business forms.

BUS 106 Shorthand I 3 (1-4) FW

Prerequisite: None

A beginning course in the theory and practice of reading and writing shorthand. Emphasis on phonetics, penmanship, word families, brief forms and phrases.

BUS 107 Shorthand II 3 (1-4) WS

Prerequisite: BUS 106, with a grade of C or better, or minimum dictation rate of 30 words per minute on material.

Continued study of theory with greater emphasis on dictation and elementary transcription.

BUS 108 Shorthand III 3 (1-4) FS

Prerequisite: BUS 107, or dictation rate of 50 words a minute on a 3 minute test of new material.

Theory and speed building. Introduction to office style dictation. Emphasis on development of speed in dictation and accuracy in transcription.

* Course offered based upon demand.

BUS 110 **Office Machines** 3 (3-2) FWS SS*

Prerequisite: None

A general survey of business and office machines. Students will receive training in techniques, processes, operation and application of the ten-key adding machines, full-keying machine, listing calculator, and key-driven calculator.

BUS 120 **Accounting I** 6 (5-2) W SS*

Prerequisite: MAT 101

Principles, techniques and tools of accounting, for understanding of the mechanics of accounting. Collecting, summarizing, analyzing, and reporting information about service and mercantile enterprises, to include practical application of the principles learned.

BUS 121 **Accounting II** 6 (5-2) S SS*

Prerequisite: BUS 120

Partnership and corporation accounting including a study of pay-rolls, federal and state taxes. Emphasis is placed on the recording, summarizing and interpretation of data for management control rather than on bookkeeping skills. Accounting services are shown as they contribute to the recognition and solution of management problems.

ECO 201 **Economics I** 5 (5-0) FWS SS*

Prerequisite: None

A general course designed to give an understanding of the organization of economic life. Includes a study of the principles and problems involved in the production, distribution and utilization of the national income, and a consideration of relationships between government and business.

ECO 202 **Economics II** 5 (5-0) FWS SS*

Prerequisite: ECO 201

A continuation of ECO 201. Greater depth in principles of economics, including the composition and pricing of national output, the distribution of income, international trade and finance, and current economic problems.

MAT 101 **Business Mathematics** 5 (5-0) FWS SS

Prerequisite: None

A course stressing the fundamental operations and their application to business problems. Topics covered: payroll, price marking, interest and discount, commission, taxes and pertinent use of mathematics in the field of business.

ENGINEERING

EGR 101 **Engineering Graphics I** 3 (2-3) F

Prerequisite: None

Study of the graphical methods and techniques used to express, interpret and communicate engineering ideas. Attainment of basic skills and techniques of drafting; use of drafting equipment; lettering; freehand orthographic and pictorial sketching; geometrical construction; orthographic instrument drawing of principle views.

EGR 102 **Engineering Graphics II** 3 (2-3) W

Prerequisite: EGR 101

Studies in solving special problems graphically, with emphasis on visualization of the relationship of objects in space

through graphical analysis. Standards and practices of dimensioning; the mechanical drawing of complex views. Methods of reproducing, filing and storing drawings.

ENG 110 **English Composition I** 3 (3-0) FWS SS
Prerequisite: Satisfactory score on English placement test. Study of grammar and composition. Review of parts of speech, sentence structure and development, vocabulary, note taking, outlining, exposition. Outside reading and writing assignments.

ENG 111 **English Composition II** 3 (3-0) FWS SS
Prerequisite: ENG 110 or approved advanced placement.
A continuation of English 110. Introduction to the essay & research methods. Increased emphasis on the writing process.

ENG 112 **English Composition III** 3 (3-0) FWS SS
Prerequisite: ENG 111
A continuation of English 111. Consideration of short stories, plays and poetry as models of literary style. Writing in depth.

ENG 150 **College Reading Survey** 3 (3-0) FWS SS
Prerequisite: None
A course designed to help students in college parallel or technical programs improve their reading skills.

ENG 201 **British Literature I** 5 (5-0) FWS SS
Prerequisite: ENG 112 or permission of the Dean
A survey of British literature from the earliest period through the 18th Century, with emphasis on major writers: Chaucer, Shakespeare, Milton, Dryden and Johnson.

ENG 202 **British Literature II** 5 (5-0) W
Prerequisite: ENG 112 or permission of the Dean
A survey of British literature from the Romantic Period to the present, with emphasis on major writers: Wordsworth, Keats, Tennyson, Browning, Shaw, Eliot.

ENG 205 **Survey of American Literature** 5 (5-0) S
Prerequisite: ENG 112
A study of the development of American literature from the Colonial period through the mid-Nineteen Sixties. Writers emphasized are Emerson, Thoreau, Whitman, Sandberg, Frost, Henry James, Eugene O'Neil, Hemingway, Albee, Steinbeck.

ENG 220 **Creative Writing** 3 (3-0) S
Prerequisite: ENG 112
Instruction and practice in the writing of short stories, short plays, poetry and creative essays. The immediate outcome of this course is an annual publication of student-written compositions.

DRA 110 **Theatre Practice** 1 (1-0) FWS
Prerequisite: None
Practical application of work needed in backstage organization of plays. Solving of specific problems in scenery, lighting, and costuming in major productions. May be repeated for credit. Night meetings.

DRA 111 **Theatre Performance** 1 (1-0) FWS

Prerequisite: None
Participation in major productions. Open only to students selected in open auditions prior to each production. May be repeated for credit. Night meetings.

DRA 210 **Introduction to the Theatre I** 3 (3-0) W

Prerequisite: None
Introduction to the theatre through the study of theatre history, types of drama and play construction. Individual projects in writing, acting, directing and design.

DRA 211 **Introduction to the Theatre II** 3 (3-0) S

Prerequisite: DRA 210 or permission of instructor
Emphasis on play production: acting, directing, staging methods.

SPH 101 **Principles of Speech** 5 (5-0) FWS SS

Prerequisite: None
A functional approach to the problem of effective speaking. The organization, composition and delivery of speeches, with particular emphasis on application in actual speech situations.

FOREIGN LANGUAGES

FRE 101 **Elementary French I** 5 (5-2) FW SS

Prerequisite: Satisfactory score on college placement tests. An introduction to French, with a modern audio-lingual approach. Up-to-date materials and methods. Emphasis first on hearing and speaking, then on reading and writing. For those with no previous French or those who do not make a satisfactory score on the French Placement Test.

FRE 102 **Elementary French II** 5 (5-2) WS SS

Prerequisite: FRE 101
A continuation of French 101.

FRE 151 **Intermediate French I** 5 (5-2) FS

Prerequisite: Two units of high school French and a satisfactory placement test score, or FRE 101 and FRE 102.
A review of the skills of hearing, speaking, reading and writing. Audiolingual work in class and in Lab. Selected supplementary readings.

FRE 152 **Intermediate French II** 5 (5-2) FW

Prerequisite: FRE 151
A continuation of French 151.

FRE 201 **Survey of French Civilization I** 5 (5-0) S

Prerequisite: FRE 152
A study of French culture and civilization. Selected readings in French literature from the Middle Ages to the present. Parallel reading and reports.

SPA 101 **Elementary Spanish I** 5 (5-2) FW SS
Prerequisite: Satisfactory score on college placement tests. An introduction to Spanish, with a modern audio-lingual approach. Up-to-date materials and methods. Emphasis first on hearing and speaking, then on reading and writing. Lab work required as part of the course. For those with no previous Spanish or those who do not make a satisfactory score on Spanish placement tests.

SPA 102 **Elementary Spanish II** 5 (5-2) WS SS
Prerequisite: SPA 101
A continuation of Spanish 101

SPA 151 **Intermediate Spanish I** 5 (5-2) FS
Prerequisite: Two units of high school Spanish and a satisfactory placement test score, or SPA 101 and SPA 102.
A review of the skills of hearing, speaking, reading and writing. Audiolingual work in class and in lab. Selected supplementary readings.

SPA 152 **Intermediate Spanish II** 5 (5-2) W
Prerequisite: SPA 151
A continuation of Spanish 151.

SPA 201 **Survey of Spanish Civilization I** 5 (5-0) S
Prerequisite: SPA 152.
A study of Spanish culture and civilization. Selected readings in the literature of Spain and Spanish America from ancient to modern times.

MATHEMATICS

MAT 103 BASIC CONCEPTS

MAT 105 **Basic Concepts of Mathematics I** 3 (3-0) FWS SS
Prerequisite: Algebra I and satisfactory score on math placement test.
A study of sets, relations, mappings, elementary logic, truth tables. Primarily designed for elementary education students.

MAT 106 **Basic Concepts of Mathematics II** 3 (3-0) FWS SS
Prerequisite: MAT 105 or approved advanced placement.
A study of numeration and number systems. Special emphasis is placed on the structure of the Real Number system.

MAT 107 **Basic Concepts of Mathematics III** 3 (3-0) WS SS
Prerequisite: MAT 106
A study of equations, inequalities, functions, permutations, selections, probability and graphing.

MAT 110 **College Algebra** 5 (5-0) FWS SS
Prerequisite: Algebra II and satisfactory score on math placement test, with Geometry recommended.
Designed for math or non-math majors. Stresses those topics

which are essential for college algebra; algebra of numbers, elementary set theory, function concept, linear and quadratic functions, inequalities, mathematical induction, binomial theorem, complex numbers, systems of equations and matrices.

MAT 120 **College Trigonometry** 5 (5-0) FWS SS
Prerequisite: MAT 110 or approved advanced placement.
Develops the analytical approach in studying the trigonometric functions using rectangular and polar coordinates, periodicity and basic graphs, trigonometric identities and equations, multiple angle formulas, inverses of trigonometric functions, solutions of triangles and complex numbers.

MAT 150 **Analytical Geometry and Calculus I** 5 (5-0) FS
Prerequisite: MAT 120 or advanced placement.
Includes an introduction to analytic geometry, functions, limits, derivatives, and an introduction to integration.

MAT 201 **Analytical Geometry and Calculus II** 5 (5-0) FW
Prerequisite: MAT 150
Derivatives of trigonometric functions. Graphs of conic sections. Maxima and minima problems. Applications of integration methods.

MAT 202 **Analytical Geometry and Calculus III** 5 (5-0) WS
Prerequisite: MAT 201
Exponential and logarithmic functions, plane curves, polar coordinates, and three dimensional analytic geometry integration techniques.

MAT 203 **Analytical Geometry and Calculus IV** 5 (5-0) S
Prerequisite: MAT 202
Differential calculus of functions of several variables, multiple integration, line and surface integrals.

MUSIC

The courses offered by the Music Department are open to all students. However, courses below 110 are more readily adaptable to a limited background in music preceeding the college level. Music courses beginning with MUS 111 require the accumulation of more musical knowledge and experience before college, and are basically designed for students who plan to major in music.

MUSIC MAJORS:

1. Each music major is required to have a major performance medium which may be chosen from the following: voice, keyboard, band or orchestral instruments.

2. An interview by and audition for the music faculty is required of all freshman and transfer students.
3. Preparatory work without credit may be required of all students unable to meet entrance requirements on performing medium.
4. Students registering for any section of MUS 106 or MUS 206 are expected to perform for a music faculty committee at the end of each quarter. Students enrolled in MUS 105 will prepare for a faculty committee upon the advice of their instructor.
5. Placement tests in music theory will be given to all freshmen and transfer students to determine level at which study will begin.

MUS 005 **Music Performance** 1 (0-5) FWS

Prerequisite: None

Individual instruction in the sections listed. A developmental course to prepare students to take music performance at the college. Although credit is given at the college for this work, the credit is not transferable as college credit. Sections: A-voice; B-piano; C-organ; D-brass; E-Woodwinds; F-Strings; G-percussion.

MUS 006 **Music Performance** 1 (0-10) FWS

Prerequisite: None

Individual instruction in the sections listed. A developmental course to prepare students to take music performance at the college level. Although credit is given at the college for this work, the credit is not transferable as college credit. Sections: A-voice; B-piano; C-organ; D-brass; E-Woodwinds; F-strings; G-percussion.

MUS 101 **Music Appreciation** 3 (3-1) FWS SS

A study of the basic fundamentals of music with a survey of forms, styles, and composers, giving reference to cultural background and the integration of music with the other arts. This course does not presuppose a technical knowledge of music. It is designed to enhance the student's understanding, thereby helping him to become a more intelligent listener.

MUS 102 **Music for Classroom Teachers** 3 (3-1) FWS

Prerequisite: None

A study of the fundamentals of music and of the methods of utilization of music in the elementary schools. Designed for students interested in elementary education. Offered as demand requires.

MUS 104 **Music Performance Laboratory** 1 (0-2) FWS

Prerequisite: Open to all students by permission of instructor

Designed to give students an opportunity to organize and participate in combos and instrumental groups. Instruction is specifically directed toward the dance and popular music fields.

MUS 105 **Music Performance** 1 (½-5) FWS SS
Prerequisite: Offered each quarter by permission of instructor
Individual instruction in the sections listed. Designed as secondary performing media for students majoring in music and for general college students with limited performing background. Sections: A-voice; B-piano; C-organ; D-brass; E-woodwinds; F-strings; G-percussion.

MUS 106 **Music Performance** 2 (1-10) FWS SS
Prerequisite: By permission of instructor
Individual instruction in the sections listed. Designed for advanced instruction and primarily for the music major. However, course is open to qualified students. Must perform exam for faculty committee each quarter to receive credit. Sections: A-voice; B-piano; C-organ; D-brass; E-woodwinds; F-strings; G-percussion.

MUS 107 **Class Instruction in Music Performance** 1 (1-5) FWS SS
Prerequisite: Permission of Instructor
Beginning instruction is offered in each section and emphasis is placed on elementary techniques. Music majors register for different sections each quarter until required sections are completed. Sections: A-voice; B-piano; D-brass; E-woodwinds; F-strings; G-percussion.

MUS 108 **Concert Choir** 1 (0-2) FWS
Prerequisite: Permission of instructor
Open to all students through audition. Repertoire includes a wide range of literature from simple folk songs to extended compositions in large forms. This group gives public performances for the college and community, also plans a tour each year. Students registering for concert choir are expected to remain in membership for the entire year.

MUS 109 **Concert Band** 1 (0-2) FWS
The study and performance of music literature for band and wind ensemble. Presents concerts during the school year and performs at college and community functions.

MUS 110 **Orchestra** 1 (0-2) FWS
Open to all qualified students.

MUS 111 **Music Theory I** 4 (4-1) F
Designed to develop basic techniques in the fundamentals of music. A correlation of ear-training, sight-singing and written and keyboard harmony.

MUS 112 **Music Theory II** 4 (4-1) W
A continuation of materials and work begun in MUS 111.

MUS 113 **Music Theory III** 4 (4-1) S
A continuation of MUS 112.

MUS 206 **Music Performance** 2 (1-10) FWS
Prerequisite: MUS 106 completion in performing medium
A continuation of studies begun in MUS 106. Advanced standing in individual music performance. Sections: A-voice; B-piano; C-organ; D-brass, E-woodwinds; F-strings; G-percussion.

MUS 211 **Music Theory IV** 4 (4-1) F
Prerequisite: MUS 113
A continuation of the course content and organization of studies from MUS 113. Intensive training in written and aural comprehension of music.

MUS 212 **Music Theory V** 4 (4-1) W
Prerequisite: MUS 211
Continued from MUS 211

MUS 213 **Music Theory VI** 4 (4-1) S
Prerequisite: MUS 212
Continued from MUS 212.

PHYSICAL EDUCATION

Individual and team Physical Education Activity in, and study of the rules, strategy, history, and terminology in the following activities:

PED 101 **Gymnastics** 1 (0-2) FWS
PED 102 **Flag Football** 1 (0-2) F
PED 103 **Tennis** 1 (0-2) FS SS
PED 104 **Soccer** 1 (0-2) F
PED 105 **Bowling** 1 (0-2) FWS
PED 106 **Track and Field** 1 (0-2) S SS
PED 107 **Volleyball** 1 (0-2) S SS
PED 108 **Archery** 1 (0-2) FWS SS
PED 109 **Weight Training** 1 (0-2) FWS
PED 110 **Horseback Riding** 1 (0-2) FW
PED 111 **Golf** 1 (0-2) FS
PED 112 **Speedball** 1 (0-2) FS SS
PED 113 **Softball** 1 (0-2) S SS

PED 150 **Personal and Community Hygiene** 5 (5-0) FWS SS
Prerequisite: None
Designed to present basic and community health knowledge and to develop proper health habits and attitudes in the individual and the community. A general survey of personal and community health habits and conditions, including adjustments of the college freshman.

PED 220 **Principles of Health and Physical Education** 5 (5-0) W SS

Prerequisite: PED 150
Designed for students who expect to teach or coach. Includes the history of health education and physical education; philosophical, psychological, physiological and sociological background for the teaching of health and physical education; basis for programs, and organization of activities.

PHILOSOPHY AND RELIGION

PHI 101 **Introduction to Philosophy** 5 (5-0) WS

Prerequisite: None
A survey of the major issues of philosophy. An examination of typical problems, such as moral freedom, the mind-body relationship, and the meaning of truth. A description of the schools of naturalism, idealism, realism and pragmatism.

PHI 110 **Ethics** 5 (5-0) WS

Prerequisite: None
An investigation into the ethical theory which attempts to determine valid principles of right and wrong as related to significant areas of human experience.

PHI 201 **Introduction to Logic** 5 (5-0) FWS

Prerequisite: None
A survey of the general principles of deductive and inductive logic and the characteristics of empirical knowledge. Emphasis on the establishment of reflective habits.

REL 101 **Religions of the World** 5 (5-0) FWS

Prerequisite: None
The great religions of mankind as related to the history of China, India, and the Near East. The study of this background and the reading of the great classics of these religions.

REL 105 **The Religious Background of Western Civilization** 5 (5-0) F

Prerequisite: None
A historical study of the impact of the faith of the Old Testament, Graeco-Roman religion, Teutonic religion and Christianity upon the life and thought of the Western World.

REL 106 **Religious Thought in the Twentieth Century** 5 (5-0) F

Prerequisite: None
A study of recent trends in religious thought as exhibited by thinkers like Niebuhr, Maritain, Buber, Tillich and Temple.

REL 151 **Introduction to Old Testament Literature** 5 (5-0) W

Prerequisite: None
The historical background of the books of the Bible, to enable students to read the Old Testament with fuller appreciation of its messages about man and God.

REL 161 **Introduction to New Testament Literature** 5 (5-0) S

Prerequisite: None
The life, teachings and significance of Jesus Christ and Saint Paul; emphasizes especially the study and comparison of the first three gospels.

REL 171 **Philosophy of Religion** 5 (5-0) F

Prerequisite: None
An inquiry into the philosophical foundations of religious experience. Problems of belief and knowledge, faith and reason, the possibility of truth, the nature of evidence, the existence and nature of God, the character and meaning of religious commitment.

SCIENCE—BIOLOGY

BIO 110 **General Biology I** 4 (3-3) F SS

Prerequisite: None
This course is designed to familiarize the individual student with the basic principles of life. Emphasis is placed upon matter and energy, cell content, cell physiology and cellular reproduction, genetics, evolution and ecology.

BIO 111 **General Biology II** 4 (3-3) W SS

Prerequisite: BIO 110.
This course will acquaint the student with the plant and animal kingdoms. An application of the principles acquired in BIO 110 will be utilized to give the student an appreciation of nature, the plants and animals and their relationships.

BIO 112 **General Biology III** 4 (3-3) S SS

Prerequisite: BIO 111.
Continuation of Biology 111.

BIO 201 **Botany** 4 (2-4) F

Prerequisites: BIO 110, 111, 112.
A survey of the plant divisions with emphasis on life histories, taxonomy, reproduction and discussion of the biologically important plant groups.

BIO 205 **Invertebrate Zoology** 4 (2-4) W

Prerequisites: BIO 110, 111, 112.
A survey of the invertebrates stressing life histories, morphology, anatomy, ecological distribution and importance. Several major dissections of the various phyla will be included as a part of the laboratory work.

BIO 206 **Vertebrate Zoology** 4 (2-4) S

Prerequisite: BIO 110, 111, 112
The study of chordates from the embryo to the adult. Emphasis will be placed on structure and function of the major body systems of many chordates. Genetics will be introduced in both the lecture and laboratory.

BIO 210 **Human Anatomy and Physiology I** 5 (4-3) F SS
Prerequisite: None
An integrated unit covering the structure and function of the human body. Dissection of a small mammal and its comparison with man is included.

BIO 211 **Human Anatomy and Physiology II** 5 (4-3) W SS
Prerequisite: BIO 210.
Continuation of Biology 210.

BIO 230 **Microbiology** 4 (2-4) S
Prerequisite: BIO 110, 111, 112, or BIO 210, 211.
A study of microorganisms with emphasis on morphology and physiological processes and their relationship to man and his environments. Processes of detection, identification and destruction of pathogenic bacteria will be employed.

SCIENCE—CHEMISTRY

CHM 110 **General Chemistry I** 4 (3-3) F SS
Prerequisite: None
An introductory course concerned with basic principles and laws governing the relationships between the different states of matter: atomic theory; chemical bonding; classification of the elements, their properties and reactions based on the Periodic Table. The laboratory experiments are designed to accent the broad principles discussed in the classroom.

CHM 111 **General Chemistry II** 4 (3-3) W SS
Prerequisite: CHM 110.
A continuation of Chemistry 110. Topics include spectroscopy, electrochemistry, and a survey of nuclear and organic chemistry.

CHM 112 **General Chemistry III** 4 (3-3) S SS
Prerequisite: CHM 111.
Topics include thermachemistry, metallurgy; and a study of the qualitative analysis of the common cations-anions, with emphasis on solutions and ionic equilibria.

CHM 205 **Elementary Organic Chemistry** 4 (3-3) F
Prerequisites: CHM 110, 111, 112.
Chemistry of the compounds of carbon. Aliphatic, aromatic, alicyclic, and heterocylic compounds are studied as to importance, methods of preparation, electronic structure, chemical and physical properties, and of purification, the principle reactions of functional groups and preparation of derivatives, and preparations which illustrate the basic mechanism reactions.

CHM 206 **Elementary Organic Chemistry I** 4 (3-3) W
Prerequisite: CHM 205.
A continuation of Chemistry 205 with particular emphasis upon the reactions of biological molecules.

CHM 207 **Elementary Organic Chemistry II** 4 (3-3) S

Prerequisite: CHM 206.

Continuation of Chemistry 205 and 206. Molecular structure is presented using physical methods, including spectral data, to determine the properties of organic molecules. Such a study establishes the theoretical basis for the correlation between molecular structure and chemical reactivity. Laboratory work consists of qualitative identification and quantitative determination of typical compounds, by both chemical and spectrometric procedure.

SCIENCE—PHYSICS

PHY 201 **General Physics I** 4 (3-2) F SS

Prerequisites: Math 110 and 120

The first of three quarters of a beginning course in general physics designed to provide an understanding of the fundamentals on which technology is based. Topics to be covered are mechanics, properties of matter, and heat.

PHY 202 **General Physics II** 4 (3-2) W SS

Prerequisite: PHY 201

A continuation of Physics 201; topics covered are mechanical wave motion, electricity and magnetism, and electronics.

PHY 203 **General Physics III** 4 (3-2) S SS

Prerequisite: PHY 202

A continuation of Physics 202; topics covered are atomic and nuclear physics and light.

PHY 210 **Engineering Physics** 5 (3-4) F SS

Prerequisite: MAT 150

Corequisite: MAT 201

The first of three quarters of a beginning course in physics with calculus designed for preengineering students. Calculus will be used, where applicable, to develop the basic principles of mechanics, properties of matter and heat.

PHY 211 **Engineering Physics I** 5 (3-4) W SS

Prerequisite: PHY 210

Corequisite: MAT 202

A continuation of Physics 210. Topics to be covered are sound, mechanical waves, electricity and magnetism.

PHY 212 **Engineering Physics II** 5 (3-4) W SS

Prerequisite: PHY 211:

A continuation of PHY 210 and 211. Topics to be covered are light, atomic and nuclear physics.

SCIENCE—SCIENCE SURVEY COURSES

SCI 101 **Physical Science Survey I** 4 (3-2) F

Prerequisite: None

A study of the principles of chemistry and geology. Chemistry topics included are: theory and structure of the atom,

chemical bonds and reactions, oxidation-reductions, organic compound. Geological principles studied are: earth materials and their history, the atmosphere erosion and sedimentation, and vulcanism and diastrophism. An integrated lecture and laboratory presentation.

SCI 102 **Physical Science Survey II** 4 (3-2) W

Prerequisite: None

A study of the principles of physics and astronomy. All the major divisions of physics will be represented, namely, mechanics, properties of matter, heat, sound, electricity and magnetism, atomic and nuclear physics, and light. The more important principles and facts about the universe and our solar system will be studied, along with their applications to space science.

SCI 103 **Biological Survey** 4 (3-2) SS

Prerequisite: None

A course designed to emphasize the fundamental principles of biology through the study of the concepts of protoplasmic and cellular organization, growth and differentiation, genetic and ecological control, and current and past evolution. An integrated lecture and laboratory presentation.

SOCIAL SCIENCES

ECO 201 See Business and Economics, page 46 for course description

ECO 202 See Business and Economics, page 46 for course description

HIS 110 **Western Civilization I** 5 (5-0) FWS SS

Prerequisite: None

An intensive survey of the forces responsible for the making of modern Europe from 1500 to 1815, with background drawn from the ancient and medieval western world. Among the forces considered: the Renaissance; Reformation; Commercial, Agricultural and Industrial Revolutions; Constitutional Government in England, Eighteenth Century Thought; Imperialism, the French Revolution, and the Congress of Vienna.

HIS 111 **Western Civilization II** 5 (5-0) FWS SS

Prerequisite: None

A study of the European civilization since the Congress of Vienna. Special attention given to the rise and fall of nazism and fascism, to the development of communism and capitalism, and to the cold war.

HIS 151 **United States History I** 5 (5-0) FWS SS

Prerequisite: None

A survey of the history of the United States from the discovery of America in 1492 to the end of the Civil War in 1865. Emphasis on the political, economic, social and cultural developments of the Republic.

HIS 152 **United States History II** 5 (5-0) FWS SS

Prerequisite: None

A survey of the history of the United States from 1865 to present. Emphasis on the economic development and the rise of the United States as a world power.

HIS 200 **World History to 1500** 5 (5-0) W

Prerequisite: None

A survey of the development of ancient and medieval civilization from prehistoric man to 1500.

POL 201 **United States Government** 5 (5-0) FWS SS

Prerequisite: None

A study of the national government of the United States. The development of the federal institution and agencies and their relationship to each other and the citizens of the Republic. Emphasis on basic concepts, structure, procedures and problems.

POL 202 **American State and Local Government** 5 (5-0) FWS

Prerequisite: None

An introduction to the roles of state and local government within the federal system, including a consideration of the organization, functions and powers of state and local units, state constitutions; and contemporary problems.

POL 205 **The American Presidency: Past & Present** 4 (4-0) F

Prerequisite: None

A course on the Presidency dealing with its origin and theory and with some of its historical highlights especially in relation to periodic times of crisis. Consideration is given to the powerful Presidents of this century, and weight will be placed on the moral and intellectual challenges presented to the President by the current state of American government and society.

PSY 201 **Principles of Psychology** 5 (5-0) FWS SS

Prerequisite: None

A basic course presenting a study of behavior in terms of perception, motivation, learning, heredity, environment, emotion, and statistical concepts.

PSY 202 **Developmental Psychology** 5 (5-0) FWS

Prerequisite: PSY 201

A study of the development and behavior of the individual from conception through childhood, adolescence and adulthood, to old age. Emphasis on the inter-relation between the biological and social influence.

SOC 201 **Principles of Sociology** 5 (5-0) FWS SS

Prerequisite: None

An analysis of the structure and functions of modern society. Illustrates societal conditions which influence individual and mass behavior.

THE DEVELOPMENTAL STUDIES PROGRAM

DEVELOPMENTAL STUDIES

The Developmental Studies Department offers programs for students with deficiencies in one or more academic areas such as English, reading, or mathematics. It has been found that students who are weak in these key subjects have little chance of success in pursuing technical or college-level curricula without some corrective work and enrichment. This program strives to provide experiences which will enable the student to work successfully in the technical, trade, or college transfer programs.

Institutional-credit courses in English, reading improvement, and mathematics are offered to students enrolled in developmental studies. The program is organized to allow each student to advance at his own rate through organized classes, individual instruction, laboratory experiences, and programmed materials. The program strives to strengthen student cultural knowledge and appreciation through trips to museums, plays, art exhibits and other experiences.

Through individual and group guidance the student is assisted in developing adequate study skills, is stimulated to analyze his own talents and interests in terms of occupational goals, and finds out about the learning resources available to him at the College.

Completion of the developmental studies program requires a student to have from one to four quarters of work, depending on original placement, progress, and the curriculum program the student plans to enter.

ENG 031 **Developmental English** (10) FWS SS

A course to introduce the student to the humanities and to increase audio and visual acuity as it relates to everyday life and the expression of ideas. Oral communication will be stressed. The reading instruction involves building a more adequate vocabulary through analyzing language phonetically and structurally with emphasis on denotation, connotation and context clues. Films, transparencies and the tachistoscope will be used.

ENG 032 **Pre-College English** (10) FWS SS

A course designed for the development of oral and written communications. Observation skills will be stressed. Emphasis will be placed mainly on the paragraph as a structural unit through a literary approach. The reading instruction involves building effective study methods through specific reading skills as these are applied to various context subjects. Films and transparencies will be used as an aid to understanding.

MAT 020 **Structure of Arithmetic** (5) FWS SS
A course designed to help the student gain and improve basic computational skills. A greater understanding of the nature of "number" and "operation" is also a major objective.

MAT 022 **Elementary Algebra** (5-10) FWS SS
A course designed to provide the student with the basic understandings and manipulative skills of elementary algebra.

MAT 023 **Geometry** (5) FWS
A course for students without geometry background designed to provide the student with the fundamentals of plane geometry.

MAT 025 **Pre-College Algebra I** (7) FWS SS
A course designed to help students acquire the theory and skills which are prerequisites for success in college algebra.

MAT 026 **Pre-College Algebra II** (7) FWS SS
A continuation of MAT 025

TECHNICAL PROGRAMS

TECHNICAL PROGRAMS

Technological development has resulted in a new complexity and increased sophistication of jobs at all levels in business, industry, agriculture and public service. Teamwork is credited with making possible the technological progress and high level of productivity and efficiency achieved by industry in the past decade. Technicians and other semi-professional workers are the key members of these teams. Technician jobs are increasing at a faster rate than any other occupational group.

Sandhills Community College provides the opportunity for high school graduates, who do not plan to enter a four year college program, to continue their education by taking a two year college level technician program. Broadly defined, technical occupations are those which require a high degree of specialized knowledge, a broad understanding of operational procedures and the ability to supervise the work of others. The technical programs at Sandhills Community College are designed to prepare students for employment in a number of basic jobs in an occupational field.

DESCRIPTIONS OF THE TECHNICAL PROGRAM

The technical programs are planned to prepare students to earn a living as technical personnel in either business, industry, government, the health occupations, or as an owner-manager of their own establishments. General education subjects are necessary adjuncts to these occupational programs. Technicians must be able to communicate effectively and understand their role in society.

Although many of the technical program courses are college level, they are not intended to be transferred later to senior colleges, but are primarily designed to develop occupational competency of the technicians. The curricula are not designed to lead toward a baccalaureate degree. Upon successful completion of a technical curriculum, the candidate is awarded an Associate in Applied Science Degree.

REQUIREMENTS FOR THE ASSOCIATE IN APPLIED SCIENCE DEGREE

Associate in Applied Science Degree candidates must complete 96 quarter hours of work including the general education requirements or their equivalent and all other requirements of the curriculum in which the student is enrolled. The student will be required to meet the same grade point standard required of other full-time students at Sandhills Community College. The student must complete a minimum of 45 quarter hours of work at

Sandhills Community College, including the last 15 or more quarter hours, to be granted the Associate in Applied Science Degree.

GENERAL EDUCATION REQUIREMENTS

Recognizing the importance of general education in all educational programs, Sandhills Community College provides each student with as much general education as is possible within the framework of his particular program. To this end, courses in English, the humanities and social sciences are considered an integral part of each technical curriculum.

Associate in Applied Science Degree candidates must complete at least the following general education courses, or their equivalent, and all other requirements outlined in the curriculum the student is following. The student's cumulative grade point average must be 1.0 ("C" or better) on work attempted at Sandhills.

English	9 quarter hours	
Humanities	3-5 quarter hours	(depending on program)
Soc. Sciences	10-15 " "	(depending on program)

PROGRAMS OF STUDY

Agricultural and Biological Technologies

Landscape Gardening

Business Technologies

Accounting
Business Administration
Secretarial—Executive, Legal, Medical

Engineering Technology

Architectural
Civil

Health Technology

Associate Degree Nursing
Mental Health Associate

AGRICULTURAL AND BIOLOGICAL TECHNOLOGY

American agriculture has advanced more in the past 50 years than in all prior years of our history. Modern farming and ranching—combined with a progressive system of marketing, processing, and merchandising—provide abundant, wholesome food when, where, and how it is wanted and other farm products with new qualities for home and industry.

Agriculture is an intricately woven web of businesses, including not only those that produce food and fiber, but also organizations that supply and service our farms and the businesses that process, store, handle, and sell farm products. These businesses employ approximately 40 percent of the working force in the United States and over 50 percent in North Carolina.

The technological explosion in agriculture and the rapid expansion of the off-farm phase of the nation's biggest industry have brought about an increasing need for semiprofessional workers known as "technicians". The agricultural industries need individuals with a good understanding of agriculture who can exercise sound judgement and competently perform such activities as selling, servicing, supervising, controlling, evaluating, diagnosing, building, operating, and testing in specialized situations.

Examples of areas where agricultural and biological technicians are needed are farm supply and equipment firms, feed and fertilizer plants, horticultural enterprises, poultry hatcheries, agricultural chemicals firms, agricultural research installations, food processing plants, forest services and industries, soil and water conservation districts, animal hospitals and other veterinary medical operations, recreational areas, and large, specialized farming operations.

LANDSCAPE GARDENING

Horticulture has experienced accelerated development in recent years. Expanding public and private building construction along with an increasing public emphasis on the use of plant materials for beautifying homes, commercial concerns, and public facilities has resulted in an unprecedented demand for ornamental plants.

The landscape gardening curriculum includes the study and practical application of many varied subjects in the field of horticulture. Landscape gardening consists of planting and growing plants, selecting plant material, arranging and planting materials in the proper manner, and proper maintenance of the material that has been planted.

The two-year curriculum will emphasize practical field training. Students will be assigned gardening projects within the greenhouses, on the campus grounds, on golf courses, and additional authorized field areas. The first spring and summer quarter will include practical field training by actual construction and management of various garden projects. During the spring quarter of the second year, students will participate in "on-the-job" field experience.

The course of study in landscape gardening is recognized by the National Association of Professional Gardeners. The Associate in Applied Science degree is awarded upon successful completion of the program.

LANDSCAPE GARDENING*

FIRST YEAR

			Course Hours Per Week		Quarter Hours
FALL			**Class**	**Lab.**	**Credit**
ENG	101	Grammar & Composition I	3	0	3
MAT	101	Business Mathematics	5	0	5
BIO	120	Applied Botany	3	3	4
HOR	121	Landscape Gardening I	3	9	6
			14	12	18
WINTER					
MAT	115	Practical Methods of Measurement	3	0	3
CHM	108	Plant Chemistry	2	3	3
ENG	102	Grammar & Composition II	3	0	3
HOR	122	Landscape Gardening II	5	9	8
			13	12	17
SPRING					
CIV	110	Elementary Surveying	3	6	5
ENG	103	Report Writing	3	0	3
HOR	123	Landscape Gardening III	5	12	9
			11	18	17
SUMMER					
HOR	124	Landscape Gardening IV	5	20	12

SECOND YEAR

FALL					
SPH	101	Principles of Speech	5	0	5
HOR	225	Landscape Gardening V	5	6	7
HOR	226	Landscape Gardening VI	3	9	6
			13	15	18
WINTER					
PSY	201	Principles of Psychology	5	0	5
HOR	227	Landscape Gardening VII	5	15	10
		Electives (Humanities)	3	0	3
			13	15	18
SPRING					
HOR	228	Landscape Gardening Practicum	0	12	4

BUSINESS TECHNOLOGIES

Sandhills Community College conducts three two-year programs in business technologies: accounting, business administration, and secretarial. Each of these programs is described

* This is a special curriculum being conducted as a research demonstration project. The general education requirements are not the same as those for other technical curricula.

in detail on the pages that follow. All of the business programs have provision for elective courses. Students with previously acquired skills in typing and shorthand may be exempt from taking BUS 102 and BUS 103, Typewriting, and BUS 106, Shorthand.

ACCOUNTING

Because of the tremendous business and industrial expansion in all parts of the country, accounting is one of the fastest growing employment fields in America today, and the job outlook for good accountants seems bright for many years to come.

The duties and responsibilities of an accountant vary somewhat in different firms. Some of the things an accountant might do are to record transactions, render periodic reports, maintain cost records, make special reports, complete tax returns, audit the books, and advise management in areas of financial affairs.

The graduate of the accounting curriculum may qualify for various jobs in business and industry leading to any of the following accounting positions: accounting clerk, payroll clerk, accounting machine operator, auditor, and cost accountant. This training plus further experience should prepare them to become office managers, accounting supervisors, and to fill other responsible positions in a business firm.

ACCOUNTING CURRICULUM

			Course Hours Per Week		Quarter Hours Credit
FIRST QUARTER			Class	Lab.	
ENG	110	English Composition	3	0	3
BUS	102	Typewriting (or elective)	1	4	3
ECO	201	Business Mathematics	5	0	5
BUS	115	Introduction to Business	5	0	5
			14	4	16
SECOND QUARTER					
ENG	111	English Composition	3	0	3
BUS	120	Accounting I	5	2	6
MAT	101	Economics I	5	0	5
BUS	101	Business Law I	3	0	3
			16	2	17
THIRD QUARTER					
ECO	202	Economics II	5	0	5
BUS	110	Office Machines	2	2	3
BUS	121	Accounting II	5	2	6
BUS	116	Business Law II	3	0	3
			15	4	17

FOURTH QUARTER					
BUS	276	Money & Banking	5	0	5
BUS	222	Accounting III	5	2	6
SPH	101	Principles of Speech	5	0	5
			15	2	16
FIFTH QUARTER					
ENG	206	Business Communication	5	0	5
BUS	223	Accounting IV	5	2	6
BUS	225	Cost Accounting	3	2	4
EDP	104	Introduction to Data Processing	3	2	4
			16	6	19
SIXTH QUARTER					
POL	201	or 202 Government	5	0	5
BUS	229	Taxes	3	2	4
BUS	269	Auditing	3	2	4
		Elective (Humanities including ENG 112)	3-5	0	3-5
			14-16	4	16-18

BUSINESS ADMINISTRATION

With the increasing population and industrial development in North Carolina, business has become more competitive and automated. Better opportunities in business will be filled by students with specialized education beyond the high school level. The business administration curriculum is designed to prepare the student in many phases of administrative work that might be encountered in the average business.

The graduate of the business administration curriculum may enter a variety of career opportunities from beginning sales person or office clerk to manager trainee. The duties and responsibilities of this graduate vary in different firms. These encompassments might include: making up and filing reports, tabulating and posting data in various books, sending out bills, checking calculations, adjusting complaints, operating various office machines, and assisting managers in supervising. Positions are available in business such as advertising; banking; credit; finance; retailing; wholesaling; hotel, tourist, and travel industry; insurance; transportation; and communications.

BUSINESS ADMINISTRATION CURRICULUM

			Course Hours Per Week		Quarter Hours
FIRST QUARTER			**Class**	**Lab.**	**Credit**
ENG	110	English Composition	3	0	3
BUS	102	Typewriting (or elective)	1	4	3

MAT	101	Business Mathematics	5	0	5
BUS	101	Introduction to Business	5	0	5
			14	4	16

SECOND QUARTER

ENG	111	English Composition	3	0	3
BUS	120	Accounting I	5	2	6
ECO	201	Economics I	5	0	5
BUS	115	Business Law I	3	0	3
			16	2	17

THIRD QUARTER

BUS	110	Office Machines	2	2	3
BUS	116	Business Law II	3	0	3
BUS	121	Accounting II	5	2	6
ECO	202	Economics II	5	0	5
			15	4	17

FOURTH QUARTER

BUS	276	Money & Banking	5	0	5
BUS	232	Sales Development	3	0	3
EDP	104	Introduction to Data Processing	3	2	4
BUS	239	Marketing	5	0	5
			16	2	17

FIFTH QUARTER

ENG	206	Business Communication	5	0	5
SPH	101	Principles of Speech	5	0	5
BUS	243	Advertising	3	2	4
		Elective (Humanities including ENG 112)	3	0	3
			16	2	17

SIXTH QUARTER

BUS	229	Taxes	3	2	4
POL	201	or 202 Government	5	0	5
BUS	235	Principles of Management	5	0	5
		Elective (Humanities)	3-5	0	3-5
			16-18	2	17-19

SECRETARIAL

The demand for better qualified secretaries in business and in the professions is becoming more acute. The purpose of this curriculum is to provide a program that will give specialized training in the accepted procedures required by business, medical, and the legal professions.

The secretarial curriculum is designed to offer students the necessary skills in typing, dictation, transcription, and terminology for employment in their chosen occupation. The special training in secretarial subjects is supplemented by related

courses in mathematics, accounting, business law, and interpersonal relationships.

Executive Secretary

The graduate executive secretary should have a knowledge of business terminology, skill in dictation, and accurate transcription of business letters and reports. The graduate may be employed as a stenographer or as a secretary. Stenographers are primarily responsible for taking dictation and transcribing letters, memoranda, or reports. The secretary, in addition to taking dictation and transcribing, is given more responsibility in connection with meeting office callers, screening telephone calls, and being an assistant to an executive. She may enter a secretarial position in a variety of offices in businesses, such as insurance companies, banks, marketing institutions, and financial firms.

Legal Secretary

The graduate legal secretary should have a knowledge of legal terminology, skill in dictation, and accurate transcription of legal records, reports, and documents. The duties of a legal secretary may consist of taking dictation and transcribing letters, memoranda and reports, meeting office callers and screening telephone calls, filing, and scheduling appointments. A variety of secretarial positions in lawyers' offices and federal and state government offices are open to the graduate legal secretary.

Medical Secretary

The graduate medical secretary should have a knowledge of medical terminology, skill in dictation and accurate transcription of medical records, reports, and letters. The duties of a medical secretary may consist of taking dictation and transcribing letters, memoranda and reports, meeting office callers and screening telephone calls, filing, and scheduling appointments. Open to the graduate are a variety of secretarial positions such as those in physicians' offices, private and public hospitals, federal and state health programs, and the drug and pharmaceutical industry.

SECRETARIAL CURRICULUM— EXECUTIVE, LEGAL, MEDICAL

			Course Hours Per Week		Quarter Hours
FIRST QUARTER			Class	Lab.	Credit
ENG	110	English Composition I	3	0	3
MAT	101	Business Mathematics	5	0	5

BUS	101	Introduction to Business	5	0	5
BUS	106	Shorthand I (or elective)	1	4	3
		and			
BUS	102	Typewriting (or elective)	1	4	3
			15	8	19
SECOND QUARTER					
ENG	111	English Composition II	3	0	3
BUS	103	Typewriting II (or elective)	1	4	3
BUS	107	Shorthand II	1	4	3
BUS	120	Accounting I	5	2	6
			10	10	15
THIRD QUARTER					
BUS	104	Typewriting III	1	4	3
BUS	108	Shorthand III	1	4	3
SPH	101	Principles of Speech	5	0	5
		Elective	3-5	0	3-5
			10-12	8	14-16
FOURTH QUARTER					
BUS	206	Dictation & Transcription*	3	2	4
BUS	205	Advanced Typewriting*	1	4	3
BUS	211	Office Machines II	2	2	3
EDP	104	Introduction to Data Processing	3	2	4
BUS	110	Office Machines	2	2	3
			11	12	17
FIFTH QUARTER					
ENG	206	Business Communication	5	0	5
BUS	207	Dictation & Transcription II*	3	2	4
ECO	201	Economics I	5	0	5
BUS	115	Business Law	3	0	3
			16	2	17
SIXTH QUARTER					
BUS	208	Dictation & Transcription III*	3	2	4
BUS	214	Secretarial Procedures	5	0	5
		Elective (in Social Studies)	5	0	5
		Elective (in Humanities)	3-5	0	3-5
			16-18	2	17-19

ENGINEERING TECHNOLOGY

"Engineering technology is that part of the engineering field which requires the application of scientific and engineering knowledge and methods combined with technical skills in sup-

* For an Executive, Legal, or Medical Secretary, these courses will be directed to the area of specialty and will have an E, and L, or an M postfix, respectively.

port of engineering activities; it lies in the occupational area between the craftsman and the engineer at the end of the area closest to the engineer.

a) Engineering technology is identified as a part of the engineering field to indicate that it does not by any means encompass the entire field and also to differentiate it from other types of technology in areas such as medicine and the biological sciences. The engineering field is viewed as a continuum extending from the craftsman to the engineer. Engineering technology falls, in the continuum, between the craftsman and the engineer and closer to the engineer than to the craftsman.

b) Engineering technology is concerned primarily with the application of established scientific and engineering knowledge and methods. Normally engineering technology is not concerned with the development of new principles and methods.

c) Technical skills such as drafting are characteristics of engineering technology. Engineers graduated from scientifically oriented curricula may be expected to have acquired fewer of these skills than previously and the engineering technician will be expected to supply them.

d) Engineering technology is concerned with the support of engineering activities whether or not the engineering technician is working under the immediate supervision of an engineer. It may well be that in a complex engineering activity he would work under the supervision of an engineer, a senior engineering technician, or a scientist.

An engineering technician is one whose education and experience qualify him to work in the field of engineering technology. He differs from a craftsman in his knowledge of scientific and engineering theory and methods, and from an engineer in his more specialized background and in his use of technical skills in support of engineering activities."*

ARCHITECTURAL TECHNOLOGY

The purpose of this program is to train the technician as an architectural draftsman for the architect's office and the building industry. Surveys show that a large number of architectural draftsmen are needed to fill existing vacancies and that the need will more than double in the next two years.

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* The American Society for Engineering Education. *Characteristics of Excellence in Engineering Technology Education.* James L. McGraw, Project Director. Urbana, Ill.: the Society, 1962. p. 11.

The program is designed to provide the individual with knowledge and skills that will lead to employment in the field of architectural drafting and afford opportunity for rapid advancement in technical knowledge and proficiency.

The graduate might be employed in an architect's office or by a building construction contractor. In the architect's office he would be competent in turning the architect's design sketches into complete and accurate working plans and detail drawings for construction purposes. He might prepare floor plans, elevation drawings, construction details, door, window and room schedules, and site plans. If employed by a contractor he would be competent in estimating, field inspection, collecting site data, and in interpreting working drawings for construction personnel. Many jobs, in fields allied to the architect and the building industry, await graduates of this program.

ARCHITECTURAL TECHNOLOGY

CURRICULUM BY QUARTERS

			Course Hours Per Week		Quarter Hours
FIRST QUARTER			**Class**	**Lab.**	**Credit**
ENG	101	Grammar & Composition I	3	0	3
MAT	131	Technical Mathematics I	5	0	5
DFT	101	Technical Drafting I	2	6	4
CIV	111	Site Surveying	2	6	4
			12	12	16
SECOND QUARTER					
ENG	102	Grammar & Composition II	3	0	3
MAT	132	Technical Mathematics II	5	0	5
PHY	101	Mechanics	3	2	4
DFT	102	Technical Drafting II	2	6	4
			13	8	16
THIRD QUARTER					
ENG	103	Report Writing	3	0	3
MAT	133	Technical Mathematics III	5	0	5
PHY	102	Heat, Light, & Sound	3	2	4
DFT	108	Architectural Drafting	2	6	4
			13	8	16
FOURTH QUARTER					
MAT	134	Technical Mathematics IV	5	0	5
PHY	103	Electricity, Magnetism and Modern Physics	3	2	4
CIV	114	Statics	5	0	5
DFT	109	Architectural Drafting	0	6	2
			13	8	16
FIFTH QUARTER					
DFT	220	Architectural Drafting	0	9	3
CIV	216	Strength of Materials	3	2	4

AHR	106	Architectural Mechanical Equipment	3	3	4
CIV	105	Architectural Materials & Methods	3	3	4
			9	17	15
SIXTH QUARTER					
DFT	221	Architectural Drafting	3	9	6
DFT	235	Codes, Specifications, & Contract Documents	3	3	4
DFT	233	Office Practice Seminar	2	0	2
		Elective in Social Science	5	0	5
			13	12	17
SEVENTH QUARTER					
DFT	236	Construction Estimating & Field Inspection	3	3	4
DFT	222	Architectural Drafting	3	9	6
		Elective in Social Science	5	0	5
		Elective in Humanities	3	0	3
			14	12	18

CIVIL TECHNOLOGY

The purpose of this program is to train the technician to perform many of the planning and supervisory tasks necessary in the construction of highways, bridges, power plants, dams, airfields, water and sewage treatment plants, industrial buildings and utilities. The expanding highway and construction industries need up-to-date technically trained personnel.

The program is designed to train technicians who will work with skilled craftsmen and engineers in performing the various functions included in the broad field of construction. The graduate might be employed as an instrument man or as a supervisory inspector. He would be equipped with the knowledge and ability to permit rapid advancement to party chief, chief inspector, estimator, material tester, or construction equipment and materials salesman.

Initial employment possibilities exist with the State Highway Commission, city and county engineering departments, private civil engineers, engineering offices and contractors in many fields of industry. Overseas employment opportunities, at unusually high salaries, are available for technicians equipped with these skills.

CIVIL TECHNOLOGY

CURRICULUM BY QUARTERS

			Course Hours Per Week		Quarter Hours Credit
FIRST QUARTER			Class	Lab.	
ENG	101	Grammar & Composition I	3	0	3
MAT	131	Technical Mathematics I	5	0	5
DFT	101	Technical Drafting I	2	6	4
CIV	101	Surveying I	2	6	4
			12	12	16
SECOND QUARTER					
ENG	102	Grammar & Composition II	3	0	3
MAT	132	Technical Mathematics II	5	0	5
DFT	102	Technical Drafting II	2	6	4
PHY	101	Mechanics	3	2	4
			13	8	16
THIRD QUARTER					
ENG	103	Report Writing	3	0	3
MAT	133	Technical Mathematics III	5	0	5
PHY	102	Heat, Light, and Sound	3	2	4
CIV	102	Surveying II	2	6	4
			13	8	16
FOURTH QUARTER					
MAT	134	Technical Mathematics IV	5	0	5
PHY	103	Electricity, Magnetism and Modern Physics	3	2	4
CIV	114	Statics	5	0	5
CIV	103	Surveying III	2	6	4
			15	8	18
FIFTH QUARTER					
CIV	201	Properties of Engineering Materials	2	3	3
CIV	216	Strength of Materials	3	2	4
CIV	217	Construction Methods & Equipment	3	2	4
CIV	218	Plain Concrete	3	3	4
			11	10	15
SIXTH QUARTER					
CIV	202	Properties of Soils	2	3	3
CIV	220	Construction Planning	2	3	3
CIV	223	Codes, Specifications & Contracts	2	0	2
		Elective in Engineering Technology	3	2	3
		Elective in Social Sciences	5	0	5
			14	8	16
SEVENTH QUARTER					
CIV	225	Construction Estimates & Cost	3	6	5

CIV	227	Construction of Road & Pavements	3	2	4
		Elective in Humanities	3	0	3
		Elective in Social Sciences	5	0	5
			14	8	17

HEALTH TECHNOLOGIES

ASSOCIATE DEGREE NURSING

The great increase of knowledge affecting health practices, the population growth, and the public demand for more health care are the basis of statistics documenting the ever increasing need for nursing personnel.

The program at Sandhills Community College combines a curriculum of nursing education and general education on the campus with selected learning experiences at hospitals, doctors' offices and other community health agencies under the direction of the College nursing faculty. The curriculum provides preparation for technical nursing. Graduates will be qualified to write the Registered Nurse examination in North Carolina. The curriculum prepares the graduates to give direct patient-centered nursing care under the supervision of a professional registered nurse as beginning level practitioners.

The program encourages the students to progress to their fullest potentials as individuals, nurses, and citizens of their communities.

The associate of science degree nursing program at Sandhills has received "Reasonable Assurance of Accreditation" from the National League of Nursing and is accredited by the North Carolina State Board of Nursing.

1967-69

CURRICULUM BY QUARTERS

			Course Hours Per Week		Quarter Hours
FIRST QUARTER			**Class**	**Lab.**	**Credit**
T-NUR	101	Nursing I	3	6	5
ENG	110	English Composition I	3	0	3
BIO	210	Human Anatomy & Physiology I	3	3	4
PSY	201	Principles of Psychology	5	0	5
PED	101	Physical Education	0	2	1
			14	11	18
SECOND QUARTER					
T-NUR	102	Nursing II	3	9	6
ENG	111	English Composition II	3	0	3
BIO	211	Human Anatomy & Physiology II	3	3	4

SOC	201	Principles of Sociology	5	0	5
			14	12	18

THIRD QUARTER

T-NUR	103	Nursing III	3	9	6
ENG	112	English Composition III	3	0	3
BIO	230	Microbiology	2	4	4
PSY	202	Developmental Psychology	5	0	5
			13	13	18

FOURTH QUARTER

T-NUR	201	Nursing IV	5	9	8
SPH	101	Principles of Speech	5	0	5
			10	9	13

FIFTH QUARTER

T-NUR	202	Nursing V	5	12	9
T-NUR	203	Nursing VI	3	0	3
ELECTIVE		Humanities	5	0	5
			13	12	17

SIXTH QUARTER

T-NUR	204	Nursing VII	5	6	7
T-NUR	205	Nursing VIII	2	3	3
ELECTIVE		Humanities	*3-5	0	3-5
			10-12	9	13-15

*3-5 credit hours depending on student

General Education	50-52
Nursing	47
Totals q.h.c.	97-99

The College reserves the right to revise this curriculum in keeping with evolving trends in associate degree nursing education.

ASSOCIATE DEGREE NURSING PROGRAM
CURRICULUM BY QUARTERS, 1968-70

			Course Hours Per Week		Quarter Hours
FIRST QUARTER			**Class**	**Lab.**	**Credit**
NUR	101	Nursing I	3	6	5
ENG	110	English Composition I	3	0	3
BIO	210	Human Anatomy and Physiology I	4	3	5
PSY	201	Principles of Psychology	5	0	5
			15	9	18

SECOND QUARTER

NUR	102	Nursing II	4	6	6
ENG	111	English Composition II	3	0	3
BIO	211	Human Anatomy and Physiology II	4	3	5
SOC	201	Principles of Sociology	5	0	5
			16	9	19

THIRD QUARTER				
NUR 103	Nursing III	2	3	3
NUR 104	Nursing IV	4	6	6
BIO 230	Microbiology	2	4	4
PSY 202	Developmental Psychology	5	0	5
		15	13	18
FOURTH QUARTER				
NUR 206	Nursing V	7	9	10
ENG 112	English Composition III	3	0	3
*Elective		3	0	3
		13	9	16
FIFTH QUARTER				
NUR 207	Nursing VI	7	12	11
*Elective		5	0	5
		12	12	16
SIXTH QUARTER				
NUR 208	Nursing VII	7	12	11
*Elective		5-8	0	5-8
		12-15	12	16-19

*Electives:

8-10 Credit hours are required in the humanities and social sciences, with at least 3 credit hours in the humanities.

5 Credit hours may be within any personal interest area.

Additional Requirement:

1 credit hour in physical education must be taken before the 6th quarter.

General Education	52-54
Nursing	52
Total q.h.c.	104-107

The college reserves the right to revise this curriculum in keeping with evolving trends in associate degree nursing education.

PROMOTION AND GRADUATION POLICY

The policy of academic probation and academic suspension of degree students will apply to the students in the nursing program with the following additions:

A. Promotion:

1. Achievement of a minimum of a C in all nursing department courses.

B. Probation:

1. A faculty committee may place a student who receives a D in any nursing course on probation for the following quarter. The committee will consist of all nursing faculty, a college counselor and the Chairman of the Nursing Department.
2. The student on probation in nursing must complete remedial work assigned in the nursing courses. At the

completion of the remedial work, the nursing faculty will raise the course grade to a C.

C. Suspension:

1. A grade of F in any one of the nursing department courses automatically will prohibit continued registration in the program for the current year.
2. A faculty committee consisting of one nursing instructor representative, a college counselor, a representative of the Admissions and Placement Committee and the Chairman of the Nursing Department may recommend that the student be readmitted to the nursing program on the next admission date.

D. Graduation:

Achievement of a grade not lower than a C in all nursing courses and a minimum quality point ratio of 1.0 in all courses attempted in the college.

MENTAL HEALTH ASSOCIATE

The rapid expansion of mental health services in recent years has magnified the already acute shortage of professional personnel. There is now increasing awareness that many time-consuming tasks being performed by professional workers could be delegated to qualified persons who have been educationally prepared for an assisting role.

Present plans for continued expansion of comprehensive community health centers will create many new positions, for which human relations skills and a broad understanding of mental health concepts are prerequisites to learning the specific skills required for job performance as a mental health associate.

CURRICULUM BY QUARTERS

FIRST YEAR

			Course Hours Per Week		Quarter Hours
FALL QUARTER			**Class**	**Lab.**	**Credit**
PSY	201	Principles of Psychology	5	0	5
MHA	100	Introduction to the Field of Mental Health	5	0	5
MHA	101	Social and Group Processes I	1	3	2
MHA	204	Social Agency Interviewing	2	3	3
			13	6	15
WINTER QUARTER					
ENG	110	English Composition I	3	0	3
SOC	201	Principles of Sociology	5	0	5
PSY	202	Developmental Psychology	5	0	5

MHA	102	Social & Group Processes II	1	3	2
			14	3	15

SPRING QUARTER

ENG	111	English Composition II	3	0	3
SPH	101	Principles of Speech	5	0	5
PSY	203	Behavior Disorders I	3	0	3
MHA	103	Social & Group Processes III	1	3	2
		Humanities Elective	3	0	3
			15	3	16

SUMMER QUARTER

MHA	104	Internship in Mental Health			6

SECOND YEAR

FALL QUARTER

PSY	204	Behavior Disorders II	3	0	3
PSY	206	Introduction to Personality	5	0	5
PSY	207	Introduction to Psychological Testing	3	6	5
MHA	201	Group Dynamics I	0	3	1
MHA	205	Introduction to Occupational and Recreational Therapy	3	0	3
			14	9	17

WINTER QUARTER

SOC	203	Social Problems	5	0	5
PSY	208	Introduction to Exceptional Children	3	0	3
MHA	202	Group Dynamics II	0	3	1
PSY	205	Adolescent Psychology	3	0	3
		Elective	3	0	3
			14	3	15

SPRING QUARTER

SOC	204	Community Organization, Conflict & Change	5	0	5
MHA	203	Group Dynamics III	0	3	1
MHA	206	Mental Health Seminar	3	0	3
SOC	202	Marriage and the Family	5	0	5
		Elective	3	0	3
			16	3	17

PROMOTION AND GRADUATION POLICY

The policy of academic probation and academic suspension of degree students will apply to the students in the mental health program with the following additions:

A. Promotion:

1. Achievement of a minimum of a grade of C in all mental health department courses.

B. Probation:

1. A faculty committee may place a student who receives a D in any mental health course on probation for the following quarter. The committee will consist of all mental health faculty, a college counselor and the Chairman of the Mental Health Department.
2. The student on probation in mental health must complete remedial work assigned in the mental health courses. At the successful completion of the remedial work, the mental health faculty will raise the course grade to a C.

C. Suspension:

1. A grade of F in any one of the mental health department courses automatically will prohibit continued registration in the program for the current year.
2. A faculty committee consisting of one mental health instructor representative, a college counselor, a representative of the Admissions and Placement Committee and the Chairman of the Mental Health Department may recommend that the student be readmitted to the mental health program on the next admission date.

D. Graduation:

Achievement of a grade not lower than a C in all mental health courses and a minimum quality point ratio of 1.0 in all courses attempted in the college.

TECHNICAL COURSE DESCRIPTIONS

The content of technical courses are outlined in the following course descriptions. Courses should be pursued in normal sequence with prerequisite and corequisite courses, or their equivalent, taken as outlined. Technical courses are designed to develop occupational competency and carry credit toward the Associate in Applied Science Degree.

One quarter hour of credit is earned for a class meeting one hour each week during a quarter with the exception of regular laboratories and manipulative laboratories. Manipulative laboratory involves the development of skills and job proficiency. Credit of one quarter hour is given for each three of these hours; one quarter hour credit is given for each two regular laboratory hours.

TECHNICAL COURSE NUMBERING SYSTEM

Technical course designations consist of a three-letter prefix and a number indicating the department and level of the course. First year courses are numbered 100 through 199 and second

year courses 200 through 299. On the same line following the prefix and number, appear the course title, the number of quarter hours of credit, the number of lecture and laboratory hours shown in parentheses, and the symbols F, W, S, and SS, indicating that the course is offered Fall, Winter, Spring, or Summer Quarter.

TECHNICAL COURSES

Air Conditioning, Heating and Refrigeration
Biology
Business
Chemistry
Civil
Drafting
Electronic Data Processing
English
Horticulture
Mathematics
Mental Health
Nursing

AIR CONDITIONING, HEATING AND REFRIGERATION

AHR 106 **Architectural Mechanical Equipment** 4 (3-3) F
Prerequisites: DFT 108, PHY 103
General study of heating, air conditioning, plumbing and electrical equipment, materials and symbols. Building code requirements pertaining to residential and commercial structures. Reading and interpretation of working drawings by mechanical engineers. Coordination of mechanical and electrical features with structural and architectural designs.

BIOLOGY

BIO 120 **Botany** 4 (3-3) F
Prerequisite: Admission to Landscape Gardening curriculum. A foundation course in general botany designed to develop a basic understanding of plant life. Integrated within the lecture and laboratory will be a study of the cell, its function and association to roots, stems, leaves, and reproductive structures. Life cycles and taxonomy will be included throughout the course.

BUSINESS

See college transfer listing for descriptions of the following courses:

BUS 101 **Introduction to Business**

BUS 102 **Typewriting I**

BUS 103 **Typewriting II**

BUS 104 **Typewriting III**

BUS 106 **Shorthand I**

BUS 107 **Shorthand II**

BUS 108 **Shorthand III**

BUS 110 **Office Machines**

BUS 120 **Accounting I**

BUS 121 **Accounting II**

ECO 201 **Economics I**

ECO 202 **Economics II**

MAT 101 **Business Mathematics**

BUS 115 **Business Law I** 3 (3-0) FWS SS

Prerequisite: BUS 101

A general course designed to acquaint the student with certain fundamentals and principles of business law, including contracts, negotiable instruments, and agencies.

BUS 116 **Business Law II** 3 (3-0) WS

Prerequisite: BUS 115

Includes the study of laws pertaining to bailments, sales, risk-bearing, partnership, corporations, mortgages, and property rights.

BUS 205 **Advanced Typewriting*** 3 (1-4) FW

Prerequisite: BUS 104. Speed requirement, 50 words per minute for five minutes.

This course gives the student the opportunity to specialize in Executive, Legal, or Medical correspondence and records, while increasing typing skills.

BUS 206 **Dictation and Transcription I*** 4 (3-2) FW

Prerequisite: BUS 108

Develops the skill of taking dictation and of transcribing, at the typewriter, materials appropriate to the course of study, which includes a review of the theory and the dictation of familiar and unfamiliar materials at varying rates of speed. Minimum dictation rate of 80 words per minute required for five minutes on new material.

BUS 207 **Dictation and Transcription II*** 4 (3-2) WS

Prerequisite: BUS 206

Covering materials appropriate to the course of study, the student develops the accuracy, speed and vocabulary that will enable her to meet the stenographic requirements of business and professional offices. Minimum dictation rate of 90 words per minute required for five minutes on new material.

* For an Executive, Legal or Medical Secretary, these courses will be directed to the area of specialty and will have an E, and L, or an M postfix, respectively.

BUS 208 **Dictation and Transcription III*** 4 (3-2) FS SS†
Prerequisite: BUS 207
Principally a speed building course, covering materials appropriate to the course of study, with emphasis on speed as well as accuracy. Minimum dictation rate of 100 words per minute required for five minutes on new material.

BUS 211 **Office Machines** 3 (2-2) FS
Prerequisite: BUS 103
Instruction in the processes, operation and application of the ditto machine, mimeograph machine, and the dictating and transcribing machine.

BUS 214 **Secretarial Procedures** 5 (5-0) S SS†
Prerequisites: BUS 104, BUS 107
Designed to acquaint the student with the responsibilities encountered by a secretary during the work day. These include the following: receptionist duties, handling the mail, telephone techniques, travel information, telegrams, office records, purchasing of supplies, office organization, insurance claims, and fundamentals of indexing and filing.

BUS 222 **Accounting III** 6 (5-2) F
Prerequisite: BUS 121
Thorough treatment of the field of general accounting, providing the necessary foundation for specialized studies that follow. The course includes among other aspects, the balance sheet, income and surplus statements, fundamental processes of recording, cash and temporary investments, and analysis of working capital.

BUS 223 **Accounting IV** 6 (5-2) W
Prerequisite: BUS 222
Additional study of intermediate accounting with emphasis on investments, plant and equipment, intangible assets and deferred charges, long-term liabilities, paid-in capital, retained earnings, and special analytical processes.

BUS 225 **Cost Accounting** 4 (3-2) W
Prerequisite: BUS 121
Nature and purposes of cost accounting; accounting for direct labor, materials and factory burden; job cost, and standard cost principles and procedures; selling and distribution cost; budgets, and executive use of cost figures.

BUS 229 **Taxes** 4 (3-2) S
Prerequisite: BUS 121
Application of federal and state taxes to various businesses and business conditions. A study of the following taxes: income, payroll, intangible, capital gain, sales and use, excise, and inheritance.

BUS 232 **Sales Development** 3 (3-0) F SS†
Prerequisites: BUS 101, MAT 101
A study of retail, wholesale and specialty selling. Emphasis

* For an Executive, Legal or Medical Secretary, these courses will be directed to the area of specialty and will have an E, an L, or an M postfix respectively.

† Course offered during summer based on demand.

is placed upon mastering and applying the fundamentals of selling. Preparation for and execution of sales demonstrations required.

BUS 235 **Principles of Management** 5 (5-0) S SS†
Prerequisite: BUS 101
Fundamentals of staff and operative management; management principles and techniques of organizing, directing and controlling. Application of techniques to specific fields.

BUS 239 **Marketing** 5 (5-0) F SS†
Prerequisites: ECO 202, BUS 101
A general survey of the field of marketing, with a detailed study of the functions, policies, and institutions involved in the marketing process.

BUS 243 **Advertising** 4 (3-2) W SS†
Prerequisite: BUS 101
The role of advertising in a free economy and its place in the media of mass communications. A study of advertising appeals; product and market research; selection of media; means of testing effectiveness of advertising. Theory and practice of writing advertising copy for various media.

BUS 269 **Auditing** 4 (3-2) S
Prerequisite: BUS 223
Principles of conducting audits and investigations; setting up accounts based on audits; collecting data on working papers; arranging and systemizing the audit, and writing the audit report. Emphasis placed on detailed audits, internal auditing, and internal control.

BUS 276 **Money and Banking** 5 (5-0) S
Prerequisite: ECO 202
A study of money, credit, commercial and central banking; credit control under the Federal Reserve System; monetary and fiscal theories and policies.

CHEMISTRY

CHM 108 **Plant Chemistry** 3 (2-3) W
Prerequisite: Admission to Landscape Gardening Curriculum
Study of the physical and chemical properties of substances, chemical changes; elements, compounds, chemical combinations; weights and measurements; theory of acids, bases, salts, solutions, solvents, oxidation and reduction. In addition, study of carbohydrates, fats, proteins; properties of soils, fertilizers and pesticides. Laboratory experiments are designed to accent principles discussed in classroom and to help the student acquire essential testing techniques.

CIVIL

CIV 101 **Surveying I** 4 (2-6) F
Corequisites: MAT 131, DFT 101
Theory and practice of plane surveying including taping, differential and profile leveling, cross sections, earthwork computations, transit, stadia and transit-tape surveys.

† Course offered during summer based on demand.

CIV 102 **Surveying II** 4 (2-6) S

Prerequisite: CIV 101

Triangulation of ordinary precision; use of plane table; calculation of areas of land; land surveying; topographic surveys and mapping.

CIV 103 **Surveying III** 4 (2-6) F SS

Prerequisites: CIV 102, MAT 133

Route surveys by ground and aerial methods; simple, compound, reverse, parabolic and spiral curves; geometric design of highways; highway surveys and plans, including mass diagrams.

CIV 105 **Architectural Materials and Methods** 4 (3-3) F

Prerequisite: DFT 108

Materials used in the construction of architectural structures will be studied. Field trips to construction sites and study of manufacturer's specifications for materials. Properties and standard sizes of structural materials, and construction techniques are included.

CIV 110 **Elementary Surveying** 5 (3-6) S

Prerequisite: MAT 115

Use of the contractors level-transit, plane table, chaining, stadia, and other elementary survey procedures are studied. Field work includes obtaining and recording topographical, leveling, and alignment data, and drafting is taught so that this information can be incorporated into useful sketches and contoured landscape drawings.

CIV 111 **Site Surveying** 4 (2-6) F

Corequisites: DFT 101, MAT 131

Basic instrumentation and topography will be studied. Chaining, leveling and operation of the transit will be applied to site surveying along with drafting room application of the field notes to locating the building on the site as well as deed registry. Finally, the cycle will be completed by application of the drafting room techniques to the site by staking out the building, erecting batter boards, and completing the preliminaries to construction.

CIV 114 **Statics** 5 (5-0) SS

Prerequisite: MAT 132

Forces, resultants, and types of force systems; moments, equilibrium of coplanar forces by analytical and graphic methods; stresses and reactions in simple structures; equilibrium of forces in space; static and kinetic friction; center of gravity, centroids, and moment of inertia.

CIV 201 **Properties of Engineering Materials** 3 (2-3) W

Prerequisite: PHY 101

Corequisite: CIV 216

Study and testing of the properties of ferrous and nonferrous metals, timber, stone, clay products, bituminous cementing materials, load and strain measurements; behavior of materials under load; qualities other than strength; control of the properties of the materials; non-destructive tests.

CIV 202 **Properties of Soils** 3 (2-3) W

Prerequisite: CIV 216

Study of soil types and their physical properties; mechanical analysis and tests of soils; techniques of subsurface investi-

gation; earth pressure theories; bearing capacity; stability of slopes; hydrostatics of ground water; methods of compaction and consolidation.

CIV 216 **Strength of Materials** 4 (3-2) F

Prerequisite: CIV 114

Fundamental stress and strain relationship; torsion; shear and bending moments; stresses and deflections in beams; introduction to statically indeterminate beams; columns; combined stresses.

CIV 217 **Construction Methods and Equipment** 4 (3-2) F

Prerequisites: DFT 102, CIV 102

Excavating methods and equipment used in building and highway construction; pile driving; construction techniques and equipment used in reinforced concrete buildings, bridges, lift-slabs, thin shells and folded plates, erection methods and equipment of structural steel buildings and bridges; carpentry in house and heavy timber construction; construction safety. Field inspection trips.

CIV 218 **Plain Concrete** 4 (3-3) F

Corequisite: CIV 201

Study and testing of the composition and properties of concrete including cementing agents, aggregates, admixtures, and air-entrainment; design and proportioning of concrete mixes to obtain pre-determined strengths and properties; methods of placing and curing concrete; standard control tests of concrete.

CIV 220 **Construction Planning** 3 (2-3) W

Prerequisites: CIV 217, CIV 218

Corequisite: CIV 223

Analysis of construction plant layout requirements and contractor's organization for building and highway projects. Construction scheduling; project control and supervision; coordinating trades on building construction. Operations, charts, and practical application of Critical Path Method (CPM) for construction planning, scheduling, and "time-cost" determination.

CIV 223 **Codes, Contracts and Specifications** 2 (2-0) W

Prerequisite: None

Basic principles and methods most significant in contract relationships; appreciation of the legal considerations in construction work; study of the National Building Code and local building codes, interpreting and outlining specification.

CIV 225 **Construction Estimates and Costs** 5 (3-6) S

Prerequisite: CIV 220

Corequisite: CIV 227

Interpretation of working drawings of timber, structural steel, and reinforced concrete structures and highways; preparation of material and labor quantity surveys from plans and specifications; approximate and detailed estimates of costs, bidding procedures and preparation of bids.

CIV 227 **Construction of Roads and Pavements** 4 (3-2) S

Prerequisites: CIV 217, CIV 218, CIV 202

Construction practices for various types of road building, including soil properties, grading, subgrading, base courses, drainage, embankments, compaction, and formwork. Design.

construction, and testing of rigid Portland-cement concrete and flexible bituminous pavements. Field inspection trips.

DRAFTING

DFT 101 Technical Drafting I 4 (2-6) F W

A course designed to provide fundamental knowledge of the principles of drafting. Basic skills and techniques of drafting included are; use of drafting equipment, lettering, freehand orthographic and pictorial sketching, geometric construction, orthographic instrument drawing of principal views. Projection problems dealing with principles of descriptive geometry, involving points, lines, planes, and connectors. The principles of isometric, oblique, and perspective drawings are introduced.

DFT 102 Technical Drafting II 4 (2-6) W S

Prerequisite: DFT 101

Development of techniques in lettering, symbols, and their interpretation; dimensioning, freehand and instrument drafting. Drawing of construction details, using appropriate material symbols and connections. Sections, scale details and full-size details will be prepared from preliminary sketches. Applications of descriptive geometry are used in visualization and analytical solutions of the drafting problems involving auxiliary views, intersections and development.

DFT 108 Architectural Drafting 4 (2-6) S

Prerequisites: DFT 102

An approach in depth to the study of architectural drafting. Development of techniques in architectural lettering, dimensioning, freehand sketching and instrument drawing. Drawings of construction details, using appropriate material symbols and conventions. Working drawings, including plans, elevations, sections, scale details and full-size details will be prepared from preliminary sketches.

DFT 109 Architectural Drafting 2 (0-6) SS F

Prerequisite: DFT 108

Continuation of DFT 108. Further development and refinement of skills in lettering, dimensioning, sketching, and drawing of construction details. Additional study of complete working drawings.

DFT 220 Architectural Drafting 5 (2-9) W

Prerequisite: DFT 109

Drawing of structural plans and details as prepared for building construction including steel, concrete, and timber structural components. Appropriate details and drawings necessary for construction and fabrication of structural members. Reference materials will be used to provide the draftsman with skills and knowledge in locating data and in using handbooks.

DFT 221 Architectural Drafting 5 (2-9) W

Prerequisite: DFT 220

Drawing of plans and details as prepared for mechanical equipment such as air conditioning, plumbing, and electrical systems by using appropriate symbols and conventions. Consideration is given to coordination of mechanical and electrical features with structural and architectural components.

DFT 222 **Architectural Drafting** 5 (2-9) S

Prerequisites: DFT 221, CIV 111, DFT 235

Preparation of the complete set of working drawings for the architectural structure. Preparation of millwork drawings, cabinets and built-in equipment detail drawings, and door, window, and room schedules. Site and landscaping plans will be studied and drawn. Final assembly of the complete document for construction purposes will be made.

DFT 233 **Office Practice Seminar** 2 (2-0) W

Prerequisite: DFT 220

A study of the professional relationship of the architectural firm in relation to clients, contractors, suppliers, consultants and other architects. Ethics of the profession as applicable to the draftsman's role in the architectural firm will be stressed.

DFT 235 **Codes, Specifications, and Contract Documents** 4 (3-3) W

Prerequisite: DFT 220

A study of building codes and their effect in relation to specifications and drawings. The purpose and writing of specifications will be studied along with their legal and practical application to working drawings. Contract documents will be analyzed and studied for the purpose of client-architect-contractor responsibilities, duties, and mutual protection.

DFT 236 **Construction Estimating and Field Inspection** 4 (3-3) S

Prerequisite: DFT 235

Interpretation of working drawings for a project; preparation of material and labor quantity surveys from plans and specifications; approximate and detailed estimates of cost. The student will study materials take-off, labor take-off, sub-contractor's estimates, overhead costs, and bid and contract procedures. Detailed inspection of the construction by comparing the finished work to the specifications.

ELECTRONIC DATA PROCESSING

EDP 104 **Introduction to Data Processing Systems** 4 (3-2) FWS SS

Fundamental concepts and operational principles of data processing systems, as an aid in developing a basic knowledge of computers, prerequisite to the detailed study of particular computer problems. This course is a prerequisite for all programming courses.

ENGLISH AND SPEECH

See college transfer listing for description of the following courses:

ENG 110 **English Composition I**

ENG 111 **English Composition II**

ENG 112 **English Composition III**

SPH 101 **Principles of Speech**

ENG 101 **Grammar and Composition I** 3 (3-0) F

Prerequisite: Satisfactory score on Placement Test
The course places emphasis throughout on exercises in writing, speaking, and listening. Analysis is made of each student's strengths and weaknesses. The instruction is geared principally to helping students improve skills in areas where common weaknesses are found. This course offered only for the technical students.

ENG 102 **Grammar and Composition II** 3 (3-0) W

Prerequisite: ENG 101
Continuation course. Designed to aid the student in the improvement of self-expression in business and technical composition. Emphasis is on the sentence, paragraph, whole composition and research techniques. This course offered only for the technical students.

ENG 103 **Report Writing** 3 (3-0) S

Prerequisite: ENG 102
The fundamentals of English are utilized as a background for organization and techniques of modern report writing. Exercises in developing typical reports, using writing techniques and graphic devices are completed by the students. Practical application in the preparation of a full-length report is required of each student at the end of the term. This report must have to do with something in the student's chosen curriculum.

ENG 206 **Business Communication** 5 (5-0) W SS

Prerequisite: ENG 111
Develops skills in techniques in writing business communications. Emphasis is placed on writing action-getting sales lectures and prospectuses. Business reports, summaries of business conferences, letters involving credit, collections, adjustments, complaints, orders, acknowledgments, remittances, and inquiries.

HORTICULTURE

HOR 121 **Landscape Gardening I** 6 (3-9) F

Prerequisite: Admission to Landscape Gardening curriculum
Orientation to procedures, practices, and terminology of landscape gardening, including the history of gardening. Practical exercises will be designed to familiarize the student with basic gardening procedures.

HOR 122 **Landscape Gardening II** 8 (5-9) W

Prerequisite: HOR 121
A study of the physical properties of soils and fertilizers and the importance of soil and fertilizer to the growth and function of plants. Basic principles and problems involved in the operation and maintenance of growing facilities for plants. Diseases and insects attacking ornamental plants will be considered. Assigned projects in greenhouses and on campus land.

HOR 123 **Landscape Gardening III** 9 (5-12)S

Prerequisite: HOR 122

Collection and identification of assigned groups of selected plants. The culture and maintenance of trees and shrubs. Pruning and general repair surgery of trees and shrubs. Principles and practices in the adaption and maintenance of turf for residential and industrial lawns and golf courses. Use and maintenance of turf equipment will be emphasized. Assigned projects in greenhouses and on campus land.

HOR 124 **Landscape Gardening IV** 12 (5-20) SS

Prerequisites: CIV 110, HOR 123

Landscape construction including lawns, flower beds, golf greens, and gardens of various styles. Management and maintenance of student projects in greenhouses and in the field. An extensive field trip will be taken to various gardens, estates, and industries employing landscape gardeners.

HOR 225 **Landscape Gardening V** 7 (5-6) F

Prerequisite: HOR 124

Collection and identification of selected trees, shrubs, vines, and weeds. Characteristics of individual species will be stressed as to adaption, use and maintenance in the landscape. Proper methods and procedures in drawing landscape plans. Selected landscape situations will be planned by the student. Materials used in developing landscapes will be considered. Management and maintenance of greenhouses and garden projects.

HOR 226 **Landscape Gardening VI** 6 (3-9) F

Prerequisite: HOR 124

Principles and techniques of propagation. Crops will be grown using various soil media, water rates, various lights, temperatures, nutrients, and chemicals.

HOR 227 **Landscape Gardening VII** 10 (5-15) W

Prerequisites: HOR 225, HOR 226

Study of landscapes in the United States, including public gardens, parks, estates, and golf courses. Assigned projects will be incorporated to emphasize design and planting of materials for particular seasonal and functional effects. Continuation of plant projects initiated in Landscape Gardening VI, in addition to proper planning, timing and cost involved in plant culture. Systematic principles of ground maintenance which may be applied to residential areas, public parks, large industrial and institutional grounds, large estates, golf courses, and similar grounds. Planning, scheduling, public relations and the selection, use, and maintenance of equipment.

HOR 228 **Practicum** 4 (0-12) S

Prerequisite: HOR 227

One quarter "on-the-job" training in a plant-related situation approved by the faculty of landscape gardening. Approved situations will include estates, public gardens, golf courses, nurseries, and related situations.

MATHEMATICS

See college transfer listing for description of the following course:

MAT 101 Business Mathematics

MAT 115 Practical Methods of Measurement 3 (3-0) W

Prerequisite: Satisfactory score on placement test.
This course is designed to provide students with the theoretical and practical knowledge of mathematics, needed in the field of horticulture. Initial work in the course centers around fundamental principles and skills of arithmetic but evolves into more advanced notions and practices involving some algebra and trigonometry. Heavy emphasis is given to the meanings and methods of mensuration and to the use of data tables. As many opportunities as possible will be provided for the student to put these concepts to practical use.

MAT 131 Technical Mathematics I 5 (5-0) F

Prerequisite: Entrance Requirements
A review of the real number system. Also studied are rules of exponents, approximate numbers, and some simple uses of the slide rule. Early introduction to trigonometry functions and the use of trigonometry tables is followed by work in the solution of right triangles. Included is a review of algebraic operations. Emphasis will be placed on inclusion of practical applications from civil and architectural engineering.

MAT 132 Technical Mathematics II 5 (5-0) F W*

Prerequisite: MAT 131 or advanced placement.
Solution methods for simultaneous equations including elimination and determinants. Logarithms to base 10 and base e, with use of tables will be studied and followed by practical examples involving the use of logarithm operations. More use of the slide rule will be studied. Advanced notions of trigonometry will be introduced including work with identities, and solution of oblique triangles using the sine and cosine laws. Emphasis will be placed on inclusion of applications from civil and architectural engineering.

MAT 133 Technical Mathematics III 5 (5-0) W S*

Prerequisite: MAT 132 or equivalent
A study of vectors will be taken up in the early part of the course. Analytic geometry of the plane is studied with emphasis on lines and the conic sections. Introduction of the differential calculus from the limit concept and delta notation continuing through the use of formulas to find derivatives of polynomials, and trigonometric and logarithmic functions. Emphasis will be placed on inclusion of applications from civil and architectural engineering.

MAT 134 Technical Mathematics IV 5 (5-0) SS F*

Prerequisite: MAT 133 or equivalent
Applications of derivatives in maxima and minima problems. Computation of areas by approximate methods. Integration is studied initially as the inverse of differentiation with problems in finding anti-derivatives of polynomial, trigonometric, and logarithmic functions. The definite integral idea is then introduced and applied to problems dealing with moments of inertia, areas, etc. Emphasis will be placed on inclusion of applications from civil and architectural engineering.

* Offered based on demand.

MENTAL HEALTH

MHA 100 Introduction to the Field of Mental Health 5 (5-0) F

An overview of the history and current trends in the field of mental health and the role of the associate on the mental health team; including studies of mental health practices from ancient to modern times with particular attention devoted to the late nineteenth and twentieth centuries. Emphasis is given to the current comprehensive community approach to mental health and to the introduction of the student to the various disciplines and professionals who work within the field of mental health.

MHA 101 Social and Group Processes I 2 (1-3) F

An introduction to interpersonal concepts and problems of communications in interpersonal transactions. Exploration of one's own attitudes, feelings and past experiences as related to problems in communications. Laboratory experiences provide opportunities to observe interpersonal relationships in mental health facilities, and to utilize these observations in follow-up discussions.

MHA 102 Social and Group Processes II 2 (1-3) W

Prerequisite: MHA 101

A continuation of MHA 101 with increased emphasis on personal attitudes, feelings, and past experiences of the student.

MHA 103 Social and Group Processes III 2 (1-3) S

Prerequisite: MHA 102

Study of group dynamics, transactional theory of groups, role playing, psychodrama and activities therapy. The student is encouraged to develop insight into interpersonal transactions through immediate experience in a sensitivity training group.

MHA 104 Internship in Mental Health 6 SS

Prerequisite: MHA 103, MHA 204

A six-week assignment in a mental health agency or agencies to acquaint the student with the philosophy, procedures, and day-to-day operations of such agencies. The student observes and participates in staff meetings, interviews, patient care, and agency planning under the supervision of a faculty member and a member of the staff of the participating agency. The student submits a written report at the end of his internship.

MHA 201 Group Dynamics I 1 (0-3) F

Prerequisites: MHA 103, MHA 104

Designed to promote the development of insight into interpersonal relationships through continuing experience in a sensitivity training group.

MHA 202 Group Dynamics II 1 (0-3) W

Prerequisite: MHA 201

Continuation of MHA 201 drawing on the student's total experience.

MHA 203 Group Dynamics III 1 (0-3) S

Prerequisite: MHA 202

The final formal group experience of the student in the program. Attention is given to developing the student's ability to communicate with others as well as to facilitate communication between others.

MHA 204 **Social Agency Interviewing** 3 (2-3) F

Prerequisite: MHA 100

Study of the purposes, structure, focus, and techniques employed in effective interviewing. Laboratory experiences provide opportunities for practice in taking personal histories.

MHA 205 **Introduction to Occupational & Recreational Therapy** 3 (3-0) F

Prerequisite: MHA 100

Overview of the types of activities utilized as therapeutic techniques, with particular emphasis on the purpose of each, ways of creating and holding interests in the activity, and the role of the mental health associate in assisting patients to participate. Each student will be required to learn one or more new skills, to teach an activity to a group of patients, and to develop a program of activities for a specific patient in an affiliating mental health facility.

MHA 206 **Mental Health Seminar** 3 (3-0) S

Prerequisite: Permission of the instructor

Discussion in depth of current issues and trends within the field of mental health. Selected topics are presented. The student is expected to utilize in a mature fashion the knowledge and experience of his previous training.

NURSING
(1967-1969)

T-NUR 101 **Nursing I** 5 (3-6) F

Prerequisite: Admission to the Nursing Program.

An introductory course in nursing encompassing health needs of the individual and providing material which is basic to all areas of nursing. A patient-centered, problem-solving approach is used with identification of the scientific principles from the related sciences which undergird nursing knowledge and skill. Concepts of mental health, communciation skills and community health aspects are included.

T-NUR 102 **Nursing II** 6 (3-9) W

Prerequisites: BIO 201, T-NUR 101

Corequisite: BIO 211

The moving forward in material described under T-NUR 101. A continuation and progression of knowledge in nutrition, pharmacology, communication, etc., as well as skills which are common to all nursing care. Consideration is given to modification of patient care due to age, trauma, surgery, and chronic illness. A beginning of the study and care of the patient with condition of the skin and musculoskeletal system.

T-NUR 103 **Nursing III** 6 (3-9) S

Prerequisites: BIO 211, T-NUR 102, PSY 201

Corequisites: BIO 230, PSY 202

Family centered maternal, infant and child care through adolescence is explored from a normal approach. Learning experiences are provided in a variety of settings to include health needs of, and care to, the family throughout the maternity cycle, and to children from infancy through adolescence.

T-NUR 201 **Nursing IV** 8 (5-9) F

Prerequisites: T-NUR 103, PSY 202, BIO 230, SOC 201

A continuation of T-NUR 103 with emphasis placed on the study and care of patients with conditions which show deviations from the normal maternity cycle, and of the ill child from infancy through adolescence. Nursing care is centered in the ability to identify the nursing needs of the patient and to understand the inter-relationship of emotional and physical illness.

T-NUR 202 **Nursing V** 9 (5-12) W

Prerequisite: T-NUR 201

A study of the nursing care needs of the adult patient in a developmental approach. A sequence of planned learning experiences designed to develop understanding, knowledge, and skill in the nursing care problems that occur as life unfolds from the young adult to the aged.

T-NUR 203 **Nursing VI** 3 (3-0) W

Prerequisite: T-NUR 201

A course designed to give the student the opportunity to identify the organizational structure of nursing. Trends in nursing, legal aspects, occupational opportunities, etc. are explored.

T-NUR 204 **Nursing VII** 7 (5-6) S

Prerequisite: T-NUR 202

A study of the nursing care of the acutely ill person whose problem is primarily emotional or mental. Areas of psychopathology, mental deficiency and mental retardation will be included. Selected clinical learning experiences will reinforce the theoretical material.

T-NUR 205 **Nursing VIII** 3 (2-3) S

Prerequisite: T-NUR 202

A study of the nursing needs of patients with more complex nursing problems. Study of the role of the team leader, the staff nurse, and today's ancillary workers. Learning experience will include care of the patient in the intensive care situation. The team approach to nursing care will be emphasized.

NURSING
(1968-1970)

NUR 101 **Nursing I** 5 (3-6) F

Prerequisites: None

Corequisites: BIO 210, PSY 201

An introductory course to provide content and learning experiences which are fundamental and common to all areas of nursing in relation to health. Opportunities are provided for the student to better understand herself as well as other people; know basic health principles; understand trends and concepts of health; have ability and skill in meeting health needs.

NUR 102 **Nursing II** 6 (4-6) W

Prerequisites: NUR 101, BIO 210, PSY 201

Corequisites: BIO 211, SOC 201

A continuation and extension of Nursing I. Designed to broaden and deepen knowledge of basic health principles as well as the understanding of health trends and concepts; to enhance the skill and ability in supplying health needs. Broad

classifications of health deviations are introduced by utilizing such categories as infection, tumors, and trauma.

NUR 103 **Nursing III** 3 (2-3) S

Prerequisites: BIO 211, SOC 201, NUR 102 .
Corequisites: BIO 230, PSY 202, NUR 104
Designed to explore areas in nursing which are unique to the family during the normal maternity cycles. Opportunities are provided for the student to achieve knowledge of the progressive changes which occur in a woman and her developing child during the maternity cycle; to understand these changes in relationship to the family; and to apply sound nursing principles to family centered care.

NUR 104 **Nursing IV** 6 (4-6) S

Prerequisites: NUR 102, BIO 211, PSY 201, SOC 201
Corequisites: BIO 230, PSY 202
Further develops materials from Nursing I and II, and is designed to stress areas essential for healthier living, the steps involved in such achievement, including common health deviations related to breathing, circulation, and nervous control.

NUR 206 **Nursing V** 10 (7-9) F

Prerequisites: NUR 103, NUR 104, BIO 230, PSY 202
A study of the common elements of nursing involved in rendering care to people who experience actual or potential deviations from normal growth, development, and homeostasis. Emphasis will be placed on the variables attending the nursing commonalities; these variables being identified as age, sex, cultural, and economic factors. Opportunity will be provided for correlation of previously gained knowledge, presentation of and clinical experiences to allow progression in nursing performance.

NUR 207 **Nursing VI** 11 (7-12) W

Prerequisite: NUR 206
Continuation of Nursing V.

NUR 208 **Nursing VII** 11 (7-12) S

Prerequisite: NUR 207
Continuation of Nursing V and Nursing VI.

PHYSICS

PHY 101 **Mechanics** 4 (3-2) W

Prerequisite: MAT 132
An analytical approach to the principles of mechanics. Subject matter includes physical measurements, vector and scalar quantities, static and dynamic systems of forces, force, linear motion, relativity rotation motion, work, energy, hyrostatics and hydrodynamics, elasticity, and simple harmonic motion. Emphasis is placed on problem solving and engineering applications. Lectures, problem drill, and laboratory exercises are coordinated to enable a better understanding of physical principles.

PHY 102 **Heat, Light, and Sound** 4 (3-2) S

Prerequisites: MAT 132, PHY 101
An introduction to the principles of heat, light, and sound. Subject matter includes wave motion, sound waves and sound sources, thermal properties of matter, kinetic theory,

change of phase, heat transfer, thermodynaimics, illumination, reflection and refraction of light, lenses and optical instruments, interference and diffraction of light, polarization of light, spectra and color. Emphasis is placed on problem solving and engineering applications.

PHY 103 **Electricity, Magnetism and Modern Physics** 4 (3-2) SS

Prerequisite: MAT 133, PHY 102
An introduction to electricity and magnetism with some topics in modern physics. Subject matter includes electrostatics, basic electric circuits, chemical and thermal electromotive forces, electromagnetism, induced electromotive forces, alternating current, basic electronics, and modern physics. Emphasis is placed on problem solving and engineering applications.

PSYCHOLOGY

See college transfer listing for descriptions of the following courses:

PSY 201 **Principles of Psychology**

PSY 202 **Developmental Psychology**

PSY 203 **Behavior Disorders I** 3 (3-0) S

Prerequisite: PSY 201
Study of abnormal mental phenomena in relation to normal life including such topics as sensation, perception, thought, sleep, dreams, hypnosis, disassociation, role of defense mechanisms, psychoneurosis, and personality disorders.

PSY 204 **Behavior Disorders II** 3 (3-0) F

Prerequisite: PSY 203
Study of selected patterns of deviant behavior with emphasis on the understanding, treatment, and prevention of these personality disorders. Attempts are made to relate personality disorders to role definition and interaction of team members in providing comprehensive mental health services.

PSY 205 **Adolescent Psychology** 3 (3-0) W

Prerequisite: PSY 202
Study of the biological, social, and psychological development of the adolescent.

PSY 206 **Introduction to Personality** 5 (5-0) F

Prerequisite: PSY 202
Study of the hereditary and environmental sources of individual differences in personalities.

PSY 207 **Introduction to Psychological Testing** 5 (3-6) F

Prerequisite: PSY 206
Designed to provide the student with knowledge of the nature and rationale of major psychological tests. Elementary statistical concepts are included to acquaint the student with the language of test design and use.

PSY 208 **Introduction to Exceptional Children** 3 (3-0) W

Prerequisite: PSY 202
Survey of the broad range of exceptionality with special

emphasis on the mentally retarded and the emotionally disturbed. Social, educational and psychological needs of the exceptional child are studied.

SOCIOLOGY

See college transfer listing for descriptions of the following course:

SOC 201 **Principles of Sociology**

SOC 202 **Marriage and the Family** 5 (5-0) S

Prerequisite: SOC 201

A study of the contemporary American family in social context, reviewing such areas as courtship and preparation for marriage, roles and status of members in their relationship, problems of adjustment within the family, the family as a social unit and institution, economic aspects of the family with emphasis on socio-economic influences on family status, influence of personality development and the effects of contemporary social change on the American family patterns.

SOC 203 **Social Problems** 5 (5-0) W

Prerequisite: SOC 201

A sociological analysis of aspects of American culture and institutions which are the sources of, or contribute to, contemporary social problems; along with the consequences, such as poor race relations, minority group problems, crime and delinquency, mental illness, and population changes.

SOC 204 **Community Organization, Conflict & Change** 5 (5-0) S

Prerequisites: SOC 203

A study of the American rural tradition contrasted with urbanism as a way of life, with emphasis on the forces that create social problems in a changing society; such as group relationships, mass living, culture conflicts, social classes, population changes and a brief analysis of the organization of various types of communities, intergroup relations, and the community power structure.

VOCATIONAL PROGRAMS

VOCATIONAL PROGRAMS

The recent growth of industry, with its rapid technological advances has created a greater need for skilled craftsmen. These craftsmen must acquire the technical knowledge of the occupation and be able to perform the necessary manipulative skills to successfully meet the increasing demands required of industry.

The objectives of the vocational programs at Sandhills Community College are to prepare individuals for initial employment in recognized skilled occupations, to re-train for entering new occupations, to advance in a given occupation by updating or upgrading of skills and knowledge, to develop an understanding of the American free enterprise system, and to develop an interest in the betterment of our society.

Vocational programs usually require one full year of participation for students on a full-time basis. Courses will be available during the day and during the evening for students desiring to enroll on a part-time basis.

Descriptions of the Vocational Programs

The vocational programs are designed to prepare the graduate to enter and make progress in a skilled occupation. Up-to-date instructional equipment is used in classroom, laboratory, and shop activities. Included in the programs of study is instruction in related and applied general education subjects with a concentration of study in technical subjects and the development of manipulative skills.

Programs of Study

The diploma is granted upon successful completion of one of the following programs:

Automobile Body Repair
Automobile Mechanics
*Drafting-Architectural
Electronics Servicing

Admission Requirements to Vocational Programs

Requirements for admission of a candidate to the regular one-year vocational program are: The candidate:

1. Must be a high school graduate or have a State approved equivalent education.
2. Must have high school credit for one unit in general mathematics. Competence may be determined by appropriate tests. A student with mathematics deficiences may be

* Curriculum discontinued at end of 1968-69 school year.

admitted only when there is strong indication of probable success.

3. Must submit the transcripts of high school and post-high school education.
4. Must demonstrate aptitude for the specific vocational training as determined by standardized tests. These tests will aid in student selection, placement, and guidance. Institutional guidance and counseling will be available to the student throughout his education.
5. Must be in acceptable physical and mental health. A medical examination may be required.
6. Must have an interview with a designated College representative for discussing enrollment plans and career goals.

Requirements for the Diploma

Candidates for the diploma must successfully complete at least 15 quarter hours of general education courses or the equivalent, and all other requirements in the curriculum in which he is enrolled. The student's grade point average must be 1.0 (C grade or better) on all work attempted at Sandhills Community College, and a minimum of thirty quarter hours of work must be completed at this institution.

The minimum general education requirements are: English (5 quarter hours), mathematics (5 quarter hours), and social sciences, (3 quarter hours).

In addition, students must have a set of basic hand tools for use in their laboratory instruction and to be eligible for graduation.

AUTOMOBILE BODY REPAIR

The field of automotive body repair and painting needs many more well-trained people to meet the growing employment demand. In this program, much of the students' time in the shop is devoted to learning skills and practicing these skills on wrecked cars. Every attempt is made to relate the practical experiences to actual on-the-job situations. Shop experiences will include straightening damaged parts, replacing panels, aligning body parts, unitized body repair, glass and trim work, inspecting and straightening frames, metal preparation and painting. The student also studies management principles, including estimating, as they apply to efficient operation of a body shop. General education courses are taught as they apply to this occupation.

AUTOMOBILE BODY REPAIR CURRICULUM

		Course Hours Per Week		Quarter Hours
FIRST QUARTER		**Class**	**Lab.**	**Credit**
AUT 1111	Auto Body Repair	3	12	7
MAT 1101	Fundamentals of Mathematics	5	0	5
PHY 1101	Applied Science	3	2	4
ENG 1101	Reading Improvement	2	0	2
WLD 1101	Basic Gas Welding	0	3	1
		13	17	19
SECOND QUARTER				
AUT 1112	Auto Body Repair	3	12	7
WLD 1105	Auto Body Welding	1	3	2
DFT 1101	Schematics and Diagrams: Power Mechanics	0	3	1
PHY 1102	Applied Science	3	2	4
ENG 1102	Communication Skills	3	0	3
		10	20	17
THIRD QUARTER				
AUT 1113	Metal Finishing & Painting	3	24	11
PSY 1101	Human Relations	3	0	3
		6	24	14
FOURTH QUARTER				
AUT 1114	Body Shop Applications	3	24	11
BUS 1103	Small Business Operations	3	0	3
		6	24	14

AUTOMOTIVE MECHANICS

This curriculum provides a training program for developing the basic knowledge and skills needed to inspect, diagnose, repair or adjust automotive vehicles. Because complexity in automotive vehicles increases each year owing to scientific discovery and new engineering, this curriculum provides a basis for the student to compare and adapt to new techniques for servicing and repair as vehicles are changed year by year.

Automotive mechanics maintain and repair mechanical, electrical, and body parts of passenger cars, trucks, and buses. In some communities and rural areas they also may service tractors or marine engines and other gasoline-powered equipment. Mechanics inspect and test to determine the causes of faulty operation. They repair or replace defective parts to restore the vehicle or machine to proper operating condition. They use shop manuals and other technical publications.

Automotive mechanics in smaller shops usually are general mechanics qualified to perform a variety of repair jobs. A large number of automobile mechanics specialize in particular types of repair work. For example, some may specialize in repairing only power steering and power brakes, or automatic transmis-

sions. Usually such specialists have an all-round knowledge of automotive repair and may occasionally be called upon to do other types of work.

AUTOMOTIVE MECHANICS CURRICULUM

		Course Hours Per Week		Quarter Hours
FIRST QUARTER		**Class**	**Lab.**	**Credit**
PME 1101	Internal Combustion Engines	3	15	8
MAT 1101	Fundamentals of Mathematics	5	0	5
ENG 1101	Reading Improvement	2	0	2
PHY 1101	Applied Science	3	2	4
		13	17	19
SECOND QUARTER				
PME 1102	Engine Electrical Systems	5	9	8
PME 1103	Engine Fuel Systems	2	3	3
ENG 1102	Communication Skills	3	0	3
DFT 1101	Schematics & Diagrams: Power Mechanics	0	3	1
PHY 1102	Applied Science	3	2	4
		13	17	19
THIRD QUARTER				
AUT 1123	Automotive Chassis and Suspensions Systems	3	9	6
AUT 1121	Braking Systems	3	3	4
PSY 1101	Human Relations	3	0	3
AHR 1101	Automotive Air Conditioning	3	3	4
WLD 1101	Basic Gas Welding	0	3	1
		12	18	18
FOURTH QUARTER				
AUT 1124	Automotive Power Train Systems	3	12	7
AUT 1125	Automotive Servicing	3	9	6
BUS 1103	Small Business Operations	3	0	3
		9	21	16

DRAFTING–ARCHITECTURAL*

This curriculum is designed to prepare students to enter the field of architectural drafting. Each course is prepared to enable an individual to advance rapidly in drafting proficiency upon entering the field of work. Courses are arranged in sequence to develop drafting skills and proficiency in mathematics and science. Because the draftsman associates with administrators, architects, engineers, and skilled workmen, courses to develop knowledge and skills in communication, human relations, economics and industrial organizations are provided to assist the

* This curriculum discontinued at end of 1968-69 school year.

student in developing understanding and confidence in his relations with many levels of personnel.

A draftsman prepares clear, complete, and accurate working plans and detail drawings, from rough or detailed sketches or notes for engineering or manufacturing purposes, according to the specified dimensions. He makes final sketches of the proposed drawing, checks dimensions of parts, materials to be used, the relation of one part to another, and the relation of the various parts of the whole structure. He makes any adjustments or changes necessary or desired, inks in lines and letters on pencil drawings as required, exercises manual skill in the manipulation of triangle, T-square, and other drafting tools, traces drawings in pencil or ink, and makes charts for representation of statistical data. He makes finished designs from sketches and utilizes knowledge of various machines, engineering practices, mathematics, building materials, and other physical sciences to complete the drawings.

The architectural draftsman performs the general duties of a draftsman and also specializes in organizing and drawing working drawings from the designer's final preliminary sketches, the mechanical equipment, and the structural drawings.

ARCHITECTURAL DRAFTING CURRICULUM

		Course Hours Per Week		Quarter Hours
FIRST QUARTER		**Class**	**Lab.**	**Credit**
DFT 1121	Drafting I	3	12	7
MAT 1102	Algebra	5	0	5
ENG 1101	Reading Improvement	2	0	2
PHY 1101	Applied Science I	3	2	4
DFT 1151	Architectural Drafting Seminar I	0	3	1
		13	17	19
SECOND QUARTER				
DFT 1122	Drafting II	3	6	5
DFT 1125	Descriptive Geometry	2	3	3
MAT 1103	Geometry	3	0	3
ENG 1102	Communication Skills	3	0	3
PHY 1102	Applied Science II	3	2	4
DFT 1152	Architectural Drafting Seminar II	0	5	2
		14	16	20
THIRD QUARTER				
DFT 1141	Architectural Drafting I	3	12	7
MAT 1104	Trigonometry	3	0	3
DFT 1144	Building Materials & Methods	3	0	3
DFT 1143	Building Mechanical Equipment	3	0	3
PSY 1101	Human Relations	3	0	3
DFT 1153	Architectural Drafting Seminar III	0	3	1
		15	15	20

FOURTH QUARTER				
DFT 1142	Architectural Drafting II	3	12	7
DFT 1145	Specifications & Contracts	3	0	3
CIV 1101	Surveying	2	3	3
BUS 1103	Small Business Operations	3	0	3
DFT 1154	Architectural Drafting Seminar IV	0	4	2
		11	19	18

ELECTRONICS SERVICING

The expanded entertainment and educational facilities in the form of monochrome and color television, frequency modulated radio, high fidelity amplifiers and stereophonic sound equipment require expanded knowledge and skill of the individual who would qualify as a competent and up-to-date serviceman. This curriculum provides a training program in the basic knowledge and skills involved in the installation, maintenance and servicing of radio, television, and sound amplifier systems. A large portion of time is spent in the laboratory verifying electronic principles and developing servicing techniques.

An electronics serviceman may be required to install, maintain, and service amplitude modulated and frequency modulated home and auto radios, transistorized radios, monochrome and color television sets, inter-communication, public address and paging systems, high fidelity and stereophonic amplifiers, record players and tape recorders.

ELECTRONICS CURRICULUM

		Course Hours Per Week		Quarter Hours
FIRST QUARTER		**Class**	**Lab.**	**Credit**
MAT 1101	Fundamentals of Mathematics	5	0	5
ENG 1101	Reading Improvement	2	0	2
ELN 1112	Direct and Alternating Current	5	18	11
		12	18	18
SECOND QUARTER				
MAT 1116	Electrical Mathematics	5	0	5
ENG 1102	Communication Skills	3	0	3
ELN 1122	Vacuum Tubes and Circuits	5	9	8
ELN 1123	Amplifier Systems	2	6	4
		15	15	20
THIRD QUARTER				
ELN 1125	Radio Receiver Servicing	2	6	4
ELN 1126	Transistor Theory and Circuits	4	15	9
PSY 1101	Human Relations	3	0	3
		9	21	16

FOURTH QUARTER				
ELN 1127	Television Receiver Circuits & Servicing	9	18	15
BUS 1103	Small Business Operations	3	0	3
		12	18	18
OPTION:				
ELN 1128	Television Receiver Circuits & Servicing	5	12	9
ELN 1129	Single Side Band Systems	4	6	6
	or			
ELN 1130	Two-Way Mobile Maintenance	4	6	6

VOCATIONAL COURSE DESCRIPTIONS

The content of vocational courses are outlined in the following course descriptions. Courses should be pursued in normal sequence with prerequisite courses, or their equivalent, taken as outlined. The vocational courses carry credit in the vocational programs only.

One quarter hour of credit is earned for a class meeting one hour each week during a quarter with the exception of regular laboratories and manipulative laboratories. Manipulative laboratory involves the development of skills and job proficiency. Credit of one quarter hour is given for each three of these laboratory hours; one quarter hour is given for each two regular laboratory hours.

VOCATIONAL COURSE NUMBERING SYSTEM

Vocational course designations consist of a three-letter prefix and a number that indicate the department and level of the course. Vocational courses are numbered 1000 through 1999. On the same line, following the prefix and number, appear the course title, the number of quarter hours of credit, the number of lecture and laboratory hours shown in parentheses, and the symbols F, W, S, and SS indicating that the course is offered during the Fall, Winter, Spring or Summer Quarter.

AIR CONDITIONING, HEATING & REFRIGERATION

AHR 1101 **Automotive Air Conditioning** 4 (3-3) S

Prerequisite: PHY 1102

General introduction to the principles of refrigeration; study of the assembly of the components and connections necessary in the mechanisms, in the methods of operation, and control; proper handling of refrigerants in charging the system.

AUTOMOTIVE

AUT 1111 Auto Body Repair 7 (3-12) F

Prerequisite: None

Basic principles of automobile construction, design, and manufacturing. A thorough study of angles, crown, and forming of steel into the complex contours of present day vehicles. Practical application of the basic principles of straightening, aligning, and painting damaged areas.

AUT 1112 Auto Body Repair 7 (3-12) W

Prerequisites: AUT 1111, WLD 1101

A thorough study of the requirements for a metal worker, including the use of essential tools, forming fender flanges and beads, and straightening typical auto body damage. The student begins acquiring skills such as shaping angles, crown, and contour of the metal of the body and fenders. Metal working and painting.

AUT 1113 Metal Finishing and Painting 11 (3-24) S

Prerequisite: AUT 1112, WLD 1105

Development of the skill to shrink stretched metal, soldering and leading, and preparation of the metal for painting. Straightening of doors, hoods, and deck lids; fitting and aligning. Painting fenders and panels, spot repairs, and complete vehicle painting; the use and application of power tools.

AUT 1114 Body Shop Applications 11 (3-24) SS

Prerequisites: AUT 1115, DFT 1101, PHY 1102

General introduction and instruction in the automotive frame and front-end suspension systems, the methods of operation and control, and the safety of the vehicle. Unit job application covers straightening of frames and front wheel alignment. The student applies all phases of training. Repair, order writing, parts purchasing, estimates of damage, and developing the final settlement with the adjuster.

AUT 1121 Braking Systems 4 (3-3) S

Prerequisite: PHY 1102

A complete study of various braking systems employed on automobiles and lightweight trucks. Emphasis is placed on how they operate, proper adjustment, and repair.

AUT 1123 Automotive Chassis and Suspension Systems 6 (3-9) S

Prerequisite: PME 1102

Principles and functions of the components of automotive chassis. Practical job instruction in adjusting and repairing of suspension and steering systems. Units to be studied will be shock absorbers, springs, steering, steering linkage, and front-end alignment.

AUT 1124 Automotive Power Train Systems 6 (3-9) SS

Prerequisites: AUT 1123, PHY 1102

Principles and functions of automotive power train systems; clutches, transmission gears, torque converters, drive shaft assemblies, rear axles and differentials. Identification of troubles, servicing, and repair.

AUT 1125 Automotive Servicing 6 (3-9) SS

Prerequisites: AHR 1101, AUT 1121, AUT 1123

Emphasis is on the shop procedures necessary in determining

the nature of troubles developed in the various component systems of the automobile. Trouble-shooting of automotive systems, providing a full range of experiences in testing, adjusting, repairing, and replacing.

BUSINESS

BUS 1103 **Small Business Operations** 3 (3-0) SS

Prerequisite: None

An introduction to the business world, problems of small business operation, basic business law, business forms and records, financial problems, ordering an inventory, layout of equipment and offices, methods of improving business, and employer-employee relations.

CIVIL

CIV 1101 **Surveying** 3 (2-3) SS

Prerequisite: MAT 1104

Basic instrumentation and topography will be studied together with field trips and drafting room application of site surveying.

DRAFTING

DFT 1101 **Schematics and Diagrams: Power Mechanics** 1 (0-3) W

Interpretation and reading of schematics and diagrams. Development of ability to read and interpret blueprints, charts, instruction and service manuals, and wiring diagrams. Information on the basic principles of lines, views, dimensioning procedures and notes.

DFT 1121 **Drafting** 7 (3-12) F

An introduction to drafting and the study of drafting practices. Instruction is given in the selection, use and care of instruments, single stroke lettering, applied geometry, free hand sketching consisting of orthographic and pictorial drawings. Orthographic projection, reading and instrument drawing of principle views (primary), and double (oblique) auxiliary views will be emphasized. Dimensioning and note practices will be studied with reference to the American Standards Association practices. Methods of reproducing drawings will be included at the appropriate time.

DFT 1122 **Drafting** 5 (3-6) W

Prerequisite: DFT 1121

The trainee will study simple and successive revolutions and their applications to practical problems. Sections and conventions will be studied and both detail and assembly sections will be drawn. Intersections and developments will be studied by relating the drawing to the sheet metal trades. Models of the assigned drawings will be made from construction paper, cardboard or similar materials as a proof of the solution to the problems drawn. Methods of drawing and projecting axonometric, oblique, and perspective drawings will be studied with emphasis on the practical applications of pictorial drawings. Various methods of shading will be introduced and dimensioning and sectioning of oblique and axonometric pictorials will be done.

DFT 1125 **Descriptive Geometry** 3 (2-3) W

Prerequisite: DFT 1121

Graphical analysis of space problems. The problems deal with practical design elements involving points, lines, planes, connectors, and a combination of these. Included are problems dealing with solid geometry theorems. Where applicable, each graphical solution shall be accompanied by the analytical solution.

DFT 1141 **Architectural Drafting** 7 (3-12) S

Prerequisite: DFT 1122

An introduction to architectural drafting. Further development of techniques in lettering, dimensioning, freehand sketching and instrument drawing. Drawings of construction details, using appropriate material symbols and conventions. Working drawings, including plans, elevations, sections, scale details, and full-size details will be prepared from preliminary sketches.

DFT 1142 **Architectural Drafting** 7 (3-12) SS

Prerequisites: DFT 1141, DFT 1143, DFT 1144

Individual and group participation in the preparation of complete working drawings for a complex architectural structure. Study of drafting room organization and relationships of personnel within the architectural office.

DFT 1143 **Building Mechanical Equipment** 3 (3-0) S

Prerequisite: DFT 1122

General study of heating, air conditioning, plumbing, and electrical equipment, materials and symbols. Building code requirements pertaining to residential and commercial structures. Reading and interpretation of working drawings by mechanical engineers.

DFT 1144 **Building Material and Methods** 3 (3-0) S

Prerequisite: None

Materials used in the construction of architectural structures will be studied. Their economic values and limitations affected by locality, budget, and codes. Field trips to construction sites and study of manufacturer's specifications for materials. Standard sizes of structural materials and modular construction techniques.

DFT 1145 **Specifications and Contracts** 3 (3-0) SS

Prerequisites: DFT 1141, DFT 1143, DFT 1144

The purpose and writings of specifications will be studied along with their legal and practical application to working drawings. Contract documents will be analyzed and studied for the purpose of client-architect-contractor responsibilities, duties and mutual protection.

DFT 1151 **Architectural Drafting Seminar I** 1 (0-3) F

Prerequisite: None

Research into the various drafting field options used by industry. The student searches out periodicals and investigates the different options through reading, visits to industry, drafting rooms in the area, and study of those areas in the *Dictionary of Occupational Titles*. Discussion of drafting field options is held with drafting instructors in seminar fashion. Objective of the course is to assist the student in determining the field in which he is most interested and will be most proficient.

DFT 1152 **Architectural Drafting Seminar II** 2 (0-5) W

Prerequisite: None

Research and study into modern drafting practices. The student seeks out and studies periodicals pertainings to current drafting practices with emphasis on changes taking place in the field. He prepares outlines indicating the differences from "textbook" and current "trade" methods for use in seminar type discussions with drafting instructors and other students. Objective of the course is to make the student aware of the changes taking place in drafting methods and to assure he is "up to date" in his vocation.

DFT 1153 **Architectural Drafting Seminar III** 1 (0-3) S

Prerequisite: None

Research and study into current trends in the building trades. Periodicals are sought out and studied to make the student aware of styles of houses being constructed and the changes taking place from past housing. To do so, the student studies the history of architecture, relating construction changes to environmental, economic, and "taste" factors, as well as to changes resulting from building material, economics and developments. Information learned is discussed in seminars with drafting instructors and other students. Objective of the course is to develop the student's knowledge of current trends beyond the "textbook" stage.

DFT 1154 **Architectural Drafting Seminar IV** 2 (0-4) SS

Prerequisite: None

Research and study into construction practices. The student researches periodicals on modern construction methods and visits and studies construction projects underway in the area. Seminars of drafting instructors and students are held to discuss the material developed. Objective of the course is to relate classroom theory with construction methods and practices.

ELECTRICITY

ELC 1112 **Direct and Alternating Current** 10 (5-15) F

Prerequisite: None

A study of the structure of matter and the electron theory, the relationship between voltage, current, and resistance in series, parallel and series-parallel circuits. Analysis of direct current circuits by Ohm's law and Kirchoff's law; sources of direct current potentials. Fundamental concepts of alternating current flow; a study of reactance, impedance, phase angle, power and resonance and alternating current circuit analysis.

ELECTRONICS

ELN 1122 **Vacuum Tubes and Circuits** 2 (5-9) W

Prerequisites: ELC 1112, MAT 1115

An introduction to vacuum tubes and their development, the theory characteristics and operation of vacuum diodes, semiconductor diodes, rectifier circuits, filter circuits, triodes and simple voltage amplifier circuits.

ELN 1123 **Amplifier Systems** 4 (2-6) W

Prerequisites: ELC 1112, MAT 1115

An introduction of commonly used servicing techniques as

applied to monophonic and sterophonic high fidelity amplifier systems and auxiliary equipment. The operation and servicing of inter-communication amplifiers and switching circuits will also be taught.

ELN 1125 **Radio Receiver Servicing** 4 (2-6) S

Prerequisites: ELN 1122, ELN 1123

Principles of radio reception and practices of servicing; included are block diagrams of radio receivers, servicing techniques of AM and FM receivers by resistance measurements, signal injection, voltage analysis, oscilloscope methods of locating faulty stages and components and the alignment of AM and FM receivers.

ELN 1126 **Transistor Theory and Circuits** 9 (4-15) S

Prerequisite: ELN 1123

Transistor theory, operation, characteristics and their application to audio and radio frequency amplifier and oscillator circuits.

ELN 1127 **Television Receiver Circuits and Servicing** 15 (9-18) SS

Prerequisites: ELN 1125, ELN 1126

A study of principles of television receivers, alignment of radio and intermediate frequency amplifiers, adjustment of horizontal and vertical sweep circuits will be taught. Techniques of trouble-shooting and repair of TV receivers with the proper use of associated test equipment will be stressed. Additional study of more specialized servicing techniques and oscilloscope wave-form analysis will be used in the adjustment, trouble-shooting and repair of color television circuits.

ELN 1128 **Television Receiver Circuits and Servicing** 9 (5-12) SS

Prerequisites: ELN 1125, ELN 1126

This course, taught in conjunction with an elective, will be a shortened version of ELN 1127.

ELN 1129 **Single Side-band Systems** 6 (3-6) SS

Prerequisites: ELN 1125, ELN 1126

An introductory course of single side-band transmission systems with or without carrier frequency, and the associated balanced modulator of phasing system used to produce this type of transmission. Time will be allotted also to the necessary circuitry in the receiver to receive this type transmission.

ELN 1130 **Two-way Mobile Maintenance** 6 (3-6) SS

Prerequisites: ELN 1125, ELN 1126

A course to acquaint the student with the theory and maintenance of fixed station and mobile station transmitters and receivers. Except for radio laws, sufficient information will be given to qualify the student to take the FCC second class radio-telephone license examination.

ENGLISH

ENG 1101 **Reading Improvement** 2 (2-0) F W*

Prerequisite: None

Designed to improve the student's ability to read rapidly

* Course offered based upon demand.

and accurately. Special machines are used for class drill to broaden the span of recognition, to increase eye coordination and word group recognition, and to train for comprehension in larger units.

ENG 1102 **Communication Skills** 3 (3-0) W S*

Prerequisite: ENG 1101
Designed to promote effective communication through correct language usage in speaking and writing.

MATHEMATICS

MAT 1101 **Fundamentals of Mathematics** 5 (5-0) F

Prerequisite: Satisfactory score on the placement test.
Practical number theory/analysis of basic operations; addition, subtraction, multiplication and division. Fractions, decimals, powers and roots, percentages, ratio and proportion. Plane and solid geometric figures used in industry; measurement of surfaces and volumes. Introduction to algebra used in trades. Practice in depth.

MAT 1102 **Algebra** 5 (5-0) F

Prerequisite: Satisfactory score on the placement test.
Basic concepts and operations of algebra. Historical background of our base-10 number system; algebraic operations; addition, subtraction, multiplication and division; fractions, letter representation, grouping, factoring, ratio and proportions, variation; graphical and algebraic solution of first degree equations; solution of simultaneous equations by: addition, subtraction, substitution, graphing; exponents, logarithms, tables and interpolation.

MAT 1103 **Geometry** 3 (3-0) W

Prerequisite: MAT 1102
Fundamental properties and definitions; plane and solid geometric figures, selected general theorems, geometric construction of lines, angles and plane figures. Dihedral angles, areas of plane figures, volumes of solids. Geometric principles are applied to shop operations.

MAT 1104 **Trigonometry** 3 (3-0) S

Prerequisites: MAT 1102, MAT 1103
Trigonometric ratios; solving problems with right triangles, using tables, and interpolating; solution of oblique triangles using law of sines and law of cosines; graphs of the trigonometric functions; inverse functions, trigonometric equations. All topics are applied to practical problems.

MAT 1116 **Electrical Mathematics** 5 (5-0) W

Prerequisite: MAT 1101
A working knowledge of the powers of 10, Ohm's Law for series and parallel circuits, quadratic equations, Kirchoff's Laws, trigonometric functions, plane vectors, alternating currents, vector algebra and logarithms.

* Course offered based upon demand.

PHYSICS

PHY 1101 Applied Science 4 (3-2) F

Prerequisite: None

An introduction to physical principles and their application in industry. Topics in this course include measurement; properties of solids, liquids, and gases; basic electrical principles.

PHY 1102 Applied Science 4 (3-2) W

Prerequisite: PHY 1101

The second in a series of two courses of applied physical principles. Topics introduced in this course are heat and thermometry, and principles of force, motion, work, energy and power.

POWER MECHANICS

PME 1101 Internal Combustion Engines 7 (3-12) F

Prerequisite: None

Development of a thorough knowledge and ability in using, maintaining, and storing the various hand tools and measuring devices needed in engine repair work. Study of the construction and operation of components of internal combustion engines. Testing of engine performance; servicing and maintenance of pistons, valves, cams and camshafts, fuel and exhaust systems, cooling systems; proper lubrication; and methods of testing, diagnosing and repairing.

PME 1102 Engine Electrical Systems 8 (5-9) W

Prerequisite: PME 1101

A thorough study of the electrical systems of the automobile. Battery, cranking devices, generators, ignition, accessories and wiring; alternator and voltage control.

PME 1103 Engine Fuel Systems 3 (2-3) W

Prerequisite: PME 1101

Thorough study of fuel systems of auto vehicles. Fuel pumps, carburetors, fuel injector, characteristics of fuels, types of fuel systems; special tools and testing equipment for fuel systems.

PSYCHOLOGY

PSY 1101 Human Relations 3 (3-0) S

Prerequisite: None

A study of basic principles of human behavior. The problems of the individual are studied in relation to society, group membership, and relationships within the work situation.

WELDING

WLD 1101 Basic Gas Welding 1 (0-3) F S

Prerequisite: None

Welding demonstration by the instructor and practice by students in the welding shop. Safe and correct methods of assembling and operating the welding equipment. Practice will be given for surface welding; bronze welding, silver-soldering, and flame-cutting methods applicable to mechanical repair work.

WLD 1105 Auto Body Welding 1 (0-3) W

Prerequisite: WLD 1101

Welding practices on material applicable to the installation of body panels and repairs to doors, fenders, hoods and deck lids. Student runs beads, does butt and fillet welding. Performs tests to detect strength and weakness of welded joints. Safety procedures are emphasized throughout the course.

ADULT EDUCATION PROGRAMS

INFORMATION

Sandhills Community College presents a listing of Adult Education courses to be offered during the 1969-70 school year. A definite schedule of classes to be offered in each quarter will be published approximately two weeks prior to registration.

Many courses can be offered during the day or evening, according to demand. A minimum enrollment of 15 is preferred for each course.

Persons desiring courses are *urged to call the Adult Education office,* indicating course preference; day or night class; fall, winter or spring quarters. *This information is helpful in scheduling.*

WHERE WILL CLASSES BE HELD?

On the campus of Sandhills Community College, and at designated locations throughout Moore and Hoke counties.

WHO MAY ENROLL?

Any person 18 years of age, or anyone not yet 18 who has completed high school. Some individuals, age 16 or 17, may be admitted to certain classes, with written consent of their high school principal.

FEES?

Many classes are offered without fees. Others require a fee, usually between two dollars ($2) and ten dollars ($10). All fees are payable at the time of registration. Books and supplies, if required for a course, will be furnished by the student.

WHEN IS REGISTRATION?

There will be three registration periods:
Fall—Early September
Winter—Late December-Early January
Spring—Late March-Early April
Watch for announcement!

WHO ARE THE ADULT EDUCATION PERSONNEL?

D. L. Furches, Director, Adult Education; Supervisor, General Adult Education Classes. Room #108, Meyer Building, Phone 919-692-6185, Extension 25

Harlan McCaskill, Assistant Director, Adult Education; Supervisor, Adult Basic Education Classes. Occupational Extension Classes.
Room #106, Meyer Building, Phone 919-692-6185, Extension 25

Hazel Fitch, Coordinator, Learning Laboratory.
Room #206, Building #1, Phone 919-692-6185, Extension 38

Russell Franklin, Coordinator, Learning Laboratory.
Room #206, Building #1, Phone 919-692-6185, Extension 38

Rachel Stone, Part-time Coordinator, Learning Laboratory.
Room #206, Building #1, Phone 919-692-6185, Extension 38

Nina Carter, Secretary
Room #105, Meyer Building, Phone 919-692-6185, Extension 25

OCCUPATIONAL – EXTENSION

BUSINESS AND RETAIL SALES.

A series of courses designed for individuals employed in retail, wholesale or related occupations. It includes salesmanship, advertising, credit, collections, customer relations, and display; each course varies from 10 to 12 hours in length.

HEALTH OCCUPATIONS.

Aide-Orderly Upgrading. 20 Hours.
An on-the-job training experience for aides and orderlies in local hospitals and nursing centers. Application of nursing procedures is made to actual job experiences, with emphasis on the role of the assistant. Courses arranged with hospitals and nursing centers.

Hospital Ward Clerk. 80 Hours.
A course designed to prepare students to function effectively as clerks in the nursing unit of a hospital or clinic. Modern concepts of health, functional relationships within a hospital, development of specific skills and personal qualities of the ward clerk are covered. Clinical practice is planned to further the students' skills within the hospital and nursing units. High school education or equivalent preferred.

Nurses' Aid and Orderly. 200 Hours.
A course designed to prepare men and women to give effective nursing care to patients, to make and report observations, and to carry out routine aspects of ward management. Emphasis is given to the role of the nurses' assistant. Clinical experience is provided for applying classroom learnings to practice in the hospital setting.

HOSPITALITY TRAINING.

Basic Nutrition and Menu Planning. 60 Hours.
An in-depth study of the role in nutrition of protein, fats, carbohydrates, vitamins and minerals; factors in developing good food habits; dietary needs of youth, and advanced work in planning and evaluating menus. The course is open to anyone, although it is primarily for school lunchroom personnel.

Communications in Hospitality Industry. 30 Hours.
A course designed as an overview of the uses and techniques of communication with particular reference to the innkeeping industry. It can be beneficial to employees at any level of the organization, but should be especially helpful to those having managerial responsibilities. Special emphasis and attention is given to the theory of communication; application of communication principles to basic management functions; effective listening, speaking and reading abilities; audio-visual communication techniques and communicating on the job.

Cook Training. 75 Hours.
Principles of interpreting menus, menu terms, recipes, measurements and other data relative to the cooking profession. It includes skill in selection, preparation, serving, and purchasing food, and keeping records of supplies and expenses to capitalize on native food-handling talent.

Hospital Housekeeping. 40 Hours.
A course designed to train personnel who are responsible for keeping the hospital clean and sanitary. All of the basic problems of hospital housekeeping are covered with a breakdown of what should be done daily and what can be done only periodically. There is much information on techniques for doing the job more effectively and with maximum efficiency.

Hospital Human Relations. 30 Hours.
This course is designed to acquaint hospital personnel with the importance of good human relations. Case studies illustrate many ways in which employees and patients react to each other. Emphasis is placed on the importance of developing proper attitudes toward the patient and fellow employees.

Hotel-Motel Front Office Procedures. 40 Hours.
The objective of this course is to teach front office personnel the importance of their job in the overall hotel-motel operation, and to develop good techniques of operation. Topics include front office management, routines, and public relations.

Human Relations. 30 Hours.
The purpose of the course is to teach the principles of business psychology and employee-guest relationship. Case studies illustrate these principles and the ways in which employees and guests react to each other. Improved employee cooperation and guest relations are stressed.

Maid Training. 60 Hours.
This course stresses the importance of the maid to the overall operation of a hotel or motel. Emphasis is placed on techniques for doing the job more quickly, more effectively and with less effort.

Overview of School Food Service. 60 Hours.
For public school lunchroom personnel. This basic orientation course presents the history of school feeding, characteristics of a good program, personnel and human relations, nutrition and menu planning, organization and management, purchasing, storing, preparation and serving of food, sanitation and safety.

Quantity Cooking. 60 Hours.
A course dealing with principles of interpreting menus, menu terms, recipes, measurements and other data relative to the cooking profession. It includes skill in selection, preparation and serving foods, purchasing food and keeping records of supplies and expenses, to capitalize on native food-handling talent to insure a profitable profession. Human relations, personality development and related topics are integrated into the course.

Quantity Food Preparation. 60 Hours.
A course for school food-service personnel with experience in methods of quantity food preparation which retain nutritive values; use of standard recipes; use of weights and measures; use and care of equipment; timing, selection, preparation and service of foods for the school lunch.

Supervisory Housekeeping. 60 Hours.
This course deals with the housekeeper's executive responsibilities, with emphasis on employee training and record keeping. Produced in cooperation with the National Executive Housekeeper's Association, this course carries 30 hours toward NEHA's own program for accreditation.

Use and Care of Equipment. 60 Hours.
A course for school food-service personnel on general care, safety, and use of equipment; specific use and care of large and small pieces of food-

service equipment; inventory and maintenance records. It is one of the courses required for certification of lunchroom employees.

Waiter-Waitress Training. 60 Hours.
A course dealing with the responsibilities of a waiter or waitress from the time he walks on the job until his day's work is done. Emphasis is placed on the fact that the good waitress is a dignified sales person rather than a "hash slinger." Every good sales person needs certain essential job knowledge and this course is designed to help the waitress develop the knowledge and attitudes necessary to do an effective job.
Other hospitality courses which may be offered if there is demand:

Food and Beverage Management and Service
Hotel-Motel Accounting.
Hotel-Motel Economy.
Hotel-Motel Law.
Hotel-Motel Restaurant Supervisory Development.
Introduction to Community Recreation.
Recreation Programming.
Service Station Selling.
Travel Information.

PUBLIC SERVICE TRAINING.

Ambulance Attendant. 22 Hours.
A course designed to develop understanding of the role of the ambulance attendant in the care and transportation of the sick and injured. Classroom discussion includes principles of administering first aid and supervised practices in application of these principles.

Introduction to Firefighting. 42 Hours.
An introduction to firefighting for professional and volunteer firefighting personnel. It includes introduction to fire service, forcible entry, portable fire extinguishers, rope practices, fire apparatus practices, fire stream and hose practices, ventilation, ladder, salvage and overhaul practices, rescue, protective breathing and firefighting procedures. A special course consisting of 10 to 15 hours on each of these topics, is available for fire departments desiring it.

RELATED APPRENTICE PROGRAMS.

Auto Body Repair. 33 Hours.
Basic principles of automobile construction, design, and manufacturing. A thorough study of angles, crown and forming of steel into the complex contour of present-day vehicles. The student applies the basic principles of straightening, aligning and painting damaged areas.

Basic Electricity. 55 Hours.
A study of the electrical structure of matter and electron theory, the relationship between voltage, current and resistance in series, parallel and series-parallel circuits. An analysis of simple current circuits by Ohm's Law and a study of the terms of electrical energy that apply to work and power. To acquaint the student with conductors and insulators, wire sizes, voltage drop, types of conduit, fuse rating and current protection, safety and first aid. The apprentice is introduced to the definitions and fundamental rules covered by the National Electric Code.

BUILDING TRADES.

Blueprint Reading—Basic. 33 Hours.
Principles of interpreting blue prints and specifications common to the

building trades. Practice in reading details for grades, foundations, floor plans, elevations, walls, doors and windows, and roofs of buildings. Development of proficiency in making three-view and pictorial sketches.

Blueprint Reading—Advanced. 33 Hours.
Designed to develop abilities in reading complex drawings in the masonry field. Blueprints of residential and commercial buildings will be studied with emphasis on the plot plan, floor plan, basement and/or foundation plan, walls and various detailed drawings of masonry work.

Bricklaying. 480 Hours.
Instruction is provided in the history of the bricklaying trade, raw materials, basic manufacturing processes and terminology. The use, care and maintenance of tools and equipment are studied. On-the-job safety practices are stressed and shop practices are provided in the basic manipulative skills. Laying out of walks, underpinings, arches, chimney construction and use of stone trim provide application of principles.

Cabinet Making. 55 Hours.
This course is intended for the student wishing to extend his knowledge of cabinet making by studying the use of hand tools and wood-working machines. Fundamental operations and procedures for making joints, types and methods of construction, how to adjust, sharpen and maintain wood-working tools and machines used on the job.

Drafting. 66 Hours.
An introduction to drafting and the study of drafting practices. Instruction is given in the selection, use, and care of instruments, single-stroke lettering, applied geometry, freehand sketching, consisting of orthographic and pictorial drawings. Orthographic projection, reading and instrument drawing of principal views, single auxiliary views (primary), and double (oblique) auxiliary views will be emphasized. Dimensioning and note practices will be studied with reference to American Standard Association practices. Methods of reproducing drawings will be included at the appropriate time.

Electronic Communications. 48 Hours.
A course designed to increase the knowledge of electrical and electronic technicians in the area of radio and TV broadcasting. Theory of electricity, electronics, electronic devices, AM and FM transmitters, radio and TV station operation, F.C.C. rules and regulations and applications of mathematics are covered. The major objective of this course is to prepare the student to successfully pass the F.C.C. examination required for a second-class radiotelephone license.

Quality Control. 60 Hours.
Recommended for in-plant educational programs dealing with fundamentals of blueprint reading, including reading, sketching and views; basic gauge reading and use of measuring instruments; and the overall fundamentals of dimensional metrology. This course is designed for theory to be applied in actual job situations for the laboratory phase of the class. May include both electrical and mechanical quality control.

Small Appliance Servicing and Repair. 66 Hours.
A study of small appliance service and repair, including basic electricity as it applies to small appliance controls and operation. Toasters, fans, vacuum cleaners, electric irons, mixers and blenders.

Small Engine Repair. 60 Hours.
This course includes the theory and fundamentals of gasoline engine operation. Actual practice in servicing and repairing engines will enable the

student to minimize engine problems and correct existing ones. Two-stroke-cycle and four-stroke-cycle principles are studied.

SUPERVISORY DEVELOPMENT TRAINING.

Art of Motivating People. 22 Hours.

A course designed to show the importance of motivation of people in achieving more effective production. A further value derived from this course is to provide self-evaluation for those attempting to stimulate others.

Economics in Business and Industry. 22 Hours.

Topics covered in this course include discussions of the following: explanation of management philosophy, such as profit motive, the free enterprise system, law of supply and demand and of wages and productivity.

Effective Communications. 22 Hours.

This course will emphasize clear and forceful oral and written communications, barriers that impede flow of smooth communications, and developing an effective communication system within an organization.

Human Relations. 22 Hours.

The fundamental principles of good supervisor-employee relations and concrete elements which simplify and clarify the complicated subject of human reactions are the content of this course. Material presented has been drawn from the work experiences of successful supervisors who have recognized and practiced the principles of good human relations.

Instructor Training. 18 Hours.

To provide the future tradesman-instructor with an approved method of instruction which will enable him to teach others and thus build a corps of qualified, trained instructors for occupations in the adult training field.

Principles of Supervision. 44 Hours.

The principles of organization and management are discussed in depth in this course. Practical approaches to business needs of planning, directing, organizing, coordinating and controlling are stressed. Students explore in detail the supervisor's responsibility for differentiating jobs, delegating authority, planning, decision-making, and improving his personal efficiency. Other supervisory courses which may be offered if there is demand.

Conference Leadership.

Cost Accounting for the Supervisor.

Creating Thinking.

Effective Speaking.

Effective Writing.

Industrial First Aid.

Industrial Safety and Accident Prevention.

Job Analysis Training.

Job Methods.

Pre-Supervisory Development Training.

Reading Improvement.

The Supervisor in North Carolina.

Work Measurement.

GENERAL ADULT EDUCATION

Accounting. 48 Hours.
A course designed to give the beginning student a basic understanding of the principles, techniques, and tools of accounting. It includes practical application of collecting, summarizing, analyzing, and reporting financial information about service and mercantile enterprises.

Bookkeeping I. 48 Hours.
Emphasis is placed on methods of recording and reporting business records. Practical application of principles learned is used in preparing the bookkeeping records for a particular business.

Bookkeeping II. 48 Hours.
Partnership and corporation bookkeeping, including a study of payrolls and state taxes. Particular emphasis is placed on bookkeeping and budgeting for a family, an individual, a professional man, and a farmer.

Bricklaying for Home Owners. 40 Hours.
For those desiring to learn basic skills for laying brick for do-it-yourself projects such as patios, walls, and borders. Covered in the course are uses of clay and shell brick, laying bricks to a line, bordering, painting, identification and use of the tools of the trade, including actual work for the development of home operation skills.

Draperies. 24 Hours.
The course covers the making of draperies, curtains, and bedspreads. Instruction is given in window treatment, hardware needed, fabric selection in accordance with mood desired, measuring and computing yardage, lined and unlined draperies.

Drawing. 30 Hours.
Understanding thorough analytical study of form in relation to space by drawing. The course is designed to help students in the visual art, especially in the area of painting.

Driver Education. 54 Hours.
A course designed to teach adults how to drive an automobile. It consists of 6 hours of classroom instruction teaching "Traffic Laws and Highway Safety," to enable the student to obtain a Learner's Permit from the License Bureau: followed by 30 hours in the classroom with the textbook *Let's Drive Right.* Eighteen hours are required in the car—12 observing and 6 driving. The 18 hours may be taken simultaneously with the 30 hours classroom instruction if scheduling permits.

Estate Planning. 10 Hours.
A presentation of background knowledge needed to draw a will. Included are techniques, legal aspects (including N. C. laws), gifts, inheritance, estate taxation, trusts, insurance, joint ownership of property, probate, the role of the administrator, and who should be administrator.

History of Art. 30 Hours.
A comprehensive survey of major visual arts from the dawn of history to the present day. It includes art in the ancient world, the middle ages, the renaissance, and the modern world.

Income Tax. 10 Hours.
A course designed to give the student information that will be helpful in completing personal income tax forms, Federal and State. Tax laws, procedures, and practical applications are included.

Interior Decorating. 25 Hours.
A course designed to give the student greater understanding and appreciation of furniture styles, use of color and design in fabrics, floor coverings, and accessories. It includes a complete study of room arrangement, color, backgrounds, period style in furniture, and current trends.

Investments. 20 Hours.
The investments course presents a basic understanding of stocks, bonds, and the market, to help in organizing an investment program. Included are such topics as types of securities, investment management, the personal balance sheet, exchanges, over-the-counter market, mutual funds, financial statement analysis, and the technical side of the market.

Knitting I. 24 Hours.
A course in the basic procedures of hand knitting, including the construction of articles from simple to advanced. Students are required to furnish needles and thread.

Knitting II. 24 Hours.
A continuation of Knitting I, with Knitting I or some knowledge of knitting a prerequisite.

Modern Math for Parents. 10 Hours.
A short orientation course to help parents better understand the new math now being taught in the local public schools. Textbook used is *The New Mathematics for Parents* by Heimer and Newman.

North Carolina History. 40 Hours.
A course with special interest to the people of our area, from another state, and perhaps of interest to North Carolina natives. It includes political, social, and economic development of North Carolina from colonial beginning to the present day.

Office Machines. 44 Hours.
A general survey of business and office machines. Students will receive training in proper techniques, processes, operation and application of the ten-key adding-listing machine, full keyboard adding-listing machine, listing and rotary calculator.

Painting I. 20 Hours.
Painting for pleasure with knowledge is the aim of this course. Color theory, painting techniques, drawing, and composition will be stressed. The course is planned to equip the student with knowledge enabling him to pursue painting as a hobby or as a vocation.

Painting II. 20 Hours.
A continuation of Painting I, with Painting I a prerequisite. Students must have background knowledge of color before attempting Painting II.

Painting III. 20 Hours.
A course for the more advanced students of painting.

Photography. 20 Hours.
A course designed to teach the skills of basic photography to beginners. Included will be the principles of a camera, selection of film, and the "do's and don't's" of picture taking. Each student must have a box camera or better and furnish his own film.

Pottery Making. 60 Hours.
Fundamentals of pottery forming techniques, coiling, slab, throwing, glaz-

ing, glaze formulation, and firing. Study and application of three-dimensional designs in the development of pottery and clay sculpture.

"Powder Puff" Mechanics. 26 Hours.

A course designed to teach women the basic fundamentals of how an automobile operates, how to make tire changes, and simple emergency repairs. Periodic preventive maintenance and general upkeep will be emphasized. Do you know why that little "hicky" needs to fit on the "thing-a 'ma' jig?"

Public Speaking. 25 Hours.

A course designed to teach the student the fundamental techniques of effective public speaking, from making simple announcements to delivering a formal address. Students will be given the opportunity to develop short talks and to present them before the class.

Reading Improvement. 16 Hours.

A course designed to improve reading comprehension by training to read more rapidly and accurately. The Keystone machine is used for drill to broaden the span of recognition, to increase eye coordination and word group recognition, and comprehension in larger units. Reading faults will be analyzed and principles of vocabulary building stressed.

Real Estate. 30 Hours.

This course will cover sale, promotion, contracts, legal aspects, and other relevant subjects. It should benefit property owners and real estate personnel, and be helpful to those desiring to become licensed realtors. The textbook used is *Questions and Answers on Real Estate* by Semenow.

Real Estate Appraisal. 20 Hours.

This course will cover factors influencing value, appraisal techniques, market comparisons, cost approach, capitalization of income and depreciation.

Religions of the World. 40 Hours.

The great religions of mankind as related to the history of China, India, and the Near East. The study of this background and the reading of the great classics of these religions.

Secretarial Procedures. 48 Hours.

Designed to acquaint the student with the responsibilities encountered by a secretary during the work day. These include the following: Receptionist duties, handling the mail, telephone techniques, travel information, telegrams, office records, purchasing of supplies, office organization, insurance claims, and fundamentals of indexing and filing.

Sewing I. 36 Hours.

A course for beginning sewing students, including the basic information necessary for construction of simple garments from patterns. Areas covered are: use of the machine, pattern selection and alteration, fabric selection and preparation, linings and interfacings, construction techniques, fitting, and pressing.

Sewing II. 36 Hours.

A continuation of Sewing I, for students with some knowledge of sewing. New areas covered are: analysis of self as related to pattern and clothing selection, principles of design, zipper insertion, and advanced construction.

Stenoscript ABC Shorthand. 40 Hours.

A successful system of shorthand based upon phonetic spelling. The course enables a person to master shorthand in the shortest time, at the least expense, and at speeds necessary. Recommended for government stenographers, secretaries, college students and those who must attend business conferences and meetings without the luxury of a secretary.

Tailoring. 36 Hours.

A course for the advanced student of sewing who has completed Sewing II or its equivalent. It includes the application of sewing techniques in working with heavy fabrics, such as wool, and the construction of suits and coats.

Typewriting I. 48 Hours.

Introduction to the touch typewriting system with emphasis on correct techniques, mastery of the keyboard, simple business correspondence, tabulation, and manuscripts. The average student should attain a speed of approximately 30 words per minute.

Typewriting II. 48 Hours.

Development of speed and accuracy in typewriting with further mastery of the correct typewriting techniques. Special areas of emphasis include the typing of business letters, special communication forms, technical papers and business reports, tabulated reports, job applications and employment tests. Students should attain a speed of 40 words per minute.

Typewriting III. 48 Hours.

Emphasis is placed on production typing problems and speed building. Special emphasis on duplicating processes, preparing legal papers, and typing in an accounting office, government office, medical office, or technical office. The average student should attain a speed of 50 words per minute; better students can do more.

COMMUNITY SERVICE CLASSES

(Supported by student fees)

Bridge Playing I. 16 Hours.

This is "how to play bridge" for the beginner. It includes the basic elements of point count, progressing to opening bids and responses, and to the playing of a hand.

Bridge Playing II. 16 Hours.

A continuation course for the student who has completed Bridge Playing I or has some knowledge of the game. Hands are bid, played, and analyzed. The finer points of the game are stressed.

Ceramics. 20 Hours.

A basic course in the art of making ceramic articles. Students learn to pour molds, load a kiln, clean, glaze, stain, and decorate greenware. Students may retain articles made.

Dancing. 10 Hours.

A class in the fundamentals of ballroom or social dancing. It includes instruction in correct posture, leading, basic steps, fox trot, rhumba, and maybe cha cha for the student with a little more experience. Instruction is by professionals.

Flower Arranging. 16 Hours.

Art principles as related to live flower arrangements. Areas covered include uses of flowers, containers and accessories, design principles, color and texture, and arrangement for special occasions.

Slimnastics. 10 Hours.

A course in exercising designed to assist female adults who desire to improve their physical fitness. Students will participate in various calisthenics and gymnastic exercises; some exercises are set to music. Dress should be comfortable; gym shoes are preferred.

Weight Watchers 32 Hours.

Using a combination of the high-protein program recommended by the N. Y. City Obesity Clinic and weekly meetings, you can learn to lose weight and keep it off through a re-education in eating habits.

Free Lifetime Membership:—When you have attended a minimum of 16 consecutive meetings and have reached your goal weight, you are eligible for a Free Lifetime Membership in Weight Watchers. You need never pay again as long as you maintain your weight within two pounds of goal. There is a registration fee of $2.00, then you will pay $2.00 weekly for 16 weeks. This course is the first of a series to be organized in North Carolina. Another one is being planned in Charlotte.

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THE LEARNING LABORATORY

In the "Learning Lab," students may *complete high school,* improve skills used in their job, or study subjects of their choice. High school graduates who plan entrance into college will find review and refresher courses designed to make the transition to college level work easier. Students may attend at times convenient to them. The lab is open from 8:00 a.m. to 10:00 p.m. Monday through Thursday, and 8:00 a.m. to 5:00 p.m. on Friday. Interested persons 18 years of age or older may register in the Learning Lab, Room 206, Building No. 1, at the college, during any of these hours. There is no charge.

ADULT BASIC EDUCATION

Classes for adults 18 years of age or older who have less than an eighth grade education. Basic subjects of reading, writing and arithmetic are studied. Classes are divided into Level I (grades 1-4) and Level II (grades 5-8). Instruction is also given in family relations, budgeting and the world of work. Upon completion of the eighth grade, students will be able to begin their high school program. The classes are free of charge to the student. Students interested should contact the college for information about classes in their community, or enroll at the classroom when the classes are announced.

Classes will be held in Moore and Hoke counties. Classes have been taught at Burlington, Hawkeye, Upchurch and West Hoke schools in Hoke County; and at Carthage, Robbins, Academy Heights in Pinehurst, Southern Pines, and at the college in Moore County.

MINI LAB (Miniature Learning Laboratory)

The "Mini Lab", a new approach to Adult Basic Education, provides the fast and slow students an opportunity to move at their own speed and ability. The student works individually with the teacher providing help if needed. A "Mini Lab" will be located in both Hoke and Moore Counties in the fall of 1969.

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